Amy Breedlove/DC/USEPA/US To Greg Fritz

04/27/2010 12:00 PM

72010 12:001 W

Subject Re: Fw: CASRN's for the polyfluoroalkyl phosphoric acid

diesters

Thanks Greg and Laurence.

Greg Fritz may contain some monoesters too but s... 04/27/2010 11:48:11 AM

bcc

From: Greg Fritz/DC/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA
Cc: Amy Breedlove/DC/USEPA/US@EPA

Date: 04/27/2010 11:48 AM

Subject: Re: Fw: CASRN's for the polyfluoroalkyl phosphoric acid diesters

may contain some monoesters too but since they are manufactured all in same pot doesn't matter



4AmyB\_fluoroalkylPhosphates.doc

Dr. Gregory Fritz USEPA/OPPTS/OPPT/EETD Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

[Deliveries to: 1201 Constitution Ave., NW EPA East (ICC) Building Cube 5133K Washington, DC 20460]

202-564-8583 (direct) 202-564-8740 (branch) 202-564-8679 (fax)

Laurence Libelo Greg, Can you easily generate a list of... 04/26/2010 11:44:39 AM

Andrew Lindstrom/RTP/USEPA/US

05/04/2010 07:39 AM

To Christopher Lau

cc David Hollandsworth, Mark Strynar, Laurence Libelo

bcc

Subject Re: addition to the PFAA Days III website

Chris and David,

Thanks very much for putting this together, I think this looks great!

One thing though, in the last paragraph I think "peer reviews" should be "peer review" instead.

I hope this will stimulate more interest in getting some good papers to come out of the conference.

Thank you,

#### Andy

Christopher Lau David: Please see attached to be adde... 05/03/2010 08:39:31 PM

From: Christopher Lau/RTP/USEPA/US

To: David Hollandsworth/RTP/USEPA/US@EPA
Cc: Andrew Lindstrom/RTP/USEPA/US@EPA

Date: 05/03/2010 08:39 PM

Subject: addition to the PFAA Days III website

#### David:

Please see attached to be added to the website. Also, add a bullet to the home page:

Call for papers: Special issues highlighting the platform and poster presentations are planned for *Reproductive Toxicology* and *Environmental Science and Technology* 

that will link to (as discussed): [how can we know this bullet is "hot' for linking?]



A call for PFAA Days III papers.doc

Andy, please let David know if you want to have any changes.

Let me know if there is any question. Thanks.

Chris

Andrew Lindstrom/RTP/USEPA/US 01/04/2010 12:06 PM To Laurence Libelo

СС

bcc

Subject Fw: Material for 1-7 Conference call

Thu 01/07/2010 10:30 AM - 12:00 PM

Attendance is for Andrew Lindstrom

Chair: **Christopher Lau/RTP/USEPA/US** Rooms: RTD Conf. Rm. 2407/RTP-RTF@EPA

Andrew Lindstrom/RTP/USEPA/US@EPA, Barbara Abbott/RTP/USEPA/US@EPA, Cathy

Fehrenbacher/DC/USEPA/US@EPA, Doug Wolf/RTP/USEPA/US@EPA, Elaine

Required:

Francis/DC/USEPA/US@EPA, Jennifer Seed/DC/USEPA/US@EPA, John Rogers/RTP/USEPA/US@EPA, Joyce Donohue/DC/USEPA/US@EPA, Kerry Hamilton/DC/USEPA/US@EPA, Marc Mills/CI/USEPA/US@EPA, Ronald

Hunter/DC/USEPA/US@EPA, Ross Highsmith/RTP/USEPA/US@EPA

Resources: Conference Bridge - 541-1591/Phone Line/RTP-Conf Bridge@EPA

Descri	

**Personal Notes** 

#### ---- Forwarded by Andrew Lindstrom/RTP/USEPA/US on 01/04/2010 12:06 PM -----

From: Christopher Lau/RTP/USEPA/US

Andrew Lindstrom/RTP/USEPA/US@EPA, Barbara Abbott/RTP/USEPA/US@EPA, Cathy To:

Fehrenbacher/DC/USEPA/US@EPA, Christopher Lau/RTP/USEPA/US@EPA, Doug

Wolf/RTP/USEPA/US@EPA, Elaine Francis/DC/USEPA/US@EPA, Jennifer Seed/DC/USEPA/US@EPA, John Rogers/RTP/USEPA/US@EPA, Joyce Donohue/DC/USEPA/US@EPA, Kerry Hamilton/DC/USEPA/US@EPA, Marc Mills/CI/USEPA/US@EPA, Ronald Hunter/DC/USEPA/US@EPA, Ross

Highsmith/RTP/USEPA/US@EPA

Date: 01/04/2010 10:10 AM

Material for 1-7 Conference call Subject:

#### Dear ALL:

Happy New Year and welcome back to work!

I have jotted down some of my thoughts on the format of PFAA Days III symposium and would like to share them with you.



PFAA Days III plan 1-7.doc

Please note that this is only a "straw-man" proposal and is open to changes. I just want to start our discussion from somewhere. I have put up some topic ideas, and some names for potential speakers and discussion leaders as place-holder; we need to work on this in particular, either at the conference call or soon afterward. It will be most helpful if everyone gives some thoughts to this and prepares to come up with suggestions during our discussion. If you would like to send me ideas before the conference call (particularly Joyce and Cathy who may not be able to join us), I can share them with everyone so that we can use our time efficiently.

Thomas Knepper has announced his 2nd International Workshop on Fluorinated Surfactants: New Developments, to be held at ldstein, Germany, from June 17-19, 2010. The workshop is supposed to focus on the new generation of fluorinated surfactants, and mostly chemistry-centric. However, they did invite Scott Mabury as keynote speaker at the 1st workshop last year, so we may be competing for a couple of the same speakers in June. We need to lock them up early.

Look forward to talking to most of you on Thursday,

Chris

Andrew Lindstrom/RTP/USEPA/US To Laurence Libelo

CC

05/04/2010 02:24 PM

bcc

Subject Re: Fw: Dalton sludge app reference

Laurence.

Your attachment was deleted.

You may find this interesting:



#### Andy

Laurence Libelo ----- Forwarded by Laurence Libelo/DC/... 05/04/2010 11:41:59 AM

From: Laurence Libelo/DC/USEPA/US

To: Andrew Lindstrom/RTP/USEPA/US@EPA

Date: 05/04/2010 11:41 AM

Subject: Fw: Dalton sludge app reference

Laurence Libelo Here is the letter that you can use as a... 05/04/2010 11:11:56 AM

Andrew Lindstrom/RTP/USEPA/US

04/08/2010 09:56 AM

To Laurence Libelo

cc Mark Strynar

bcc

Subject Fw: ES&T Focus Issue

Laurence,

Here we go.

#### Andy

---- Forwarded by Andrew Lindstrom/RTP/USEPA/US on 04/08/2010 09:55 AM -----

From: "Darcy Gentleman" < D\_Gentleman@acs.org>

To: Mark Strynar/RTP/USEPA/US@EPĀ, Andrew Lindstrom/RTP/USEPA/US@EPĀ

Dear Mark and Andy,

As promised, please find attached the request for additional documentation regarding the PFC Focus Issue. Note that we have also set the date for October 2011, meaning submissions are due by January 1, 2011.

Please email me if you have any questions.

Cheers, Darcy

Darcy J. Gentleman, Ph.D.

Managing Editor

Environmental Science & Technology
Journal of Agricultural and Food Chemistry
1155 16th St., NW | Washington | DC 20036
T 202-872-8061| M 202-870-9461| F 202-872-4403

www.acs.org

ACS Chemistry for Life American Chemical Society



PFC focus issue.doc

Andrew Lindstrom/RTP/USEPA/US

02/25/2010 11:52 AM

To Mark Strynar, Phillip Bost, Amy Delinsky, Shoji Nakayama, Larry-RTP McMillan, Peter Egeghy, Laurence Libelo, John Washington, Ross Highsmith

CC

bcc

Subject New PFC Papers

All,

Some interesting new papers here:









Egeghy and Lorber 2010.pdf PFOA and Elevated Uric Acid.pdf pfcmarketbasket.pdf PFCs and Cholesterol.pdf

# Andrew Lindstrom/RTP/USEPA/US

05/13/2010 09:05 AM

To Mark Strynar, Shoji Nakayama, Zhishi Guo, Ken Krebs, Laurence Libelo, Heidi Hubbard, Phillip Bost

cc bcc

Subject an industry perspective

AII,

Here is something that you may be interested in:



textile fluorochemicals-what users need to know.pdf

Please see pages 32-35 for an industry perspective.

Thanks,

Andy

Andrew To Mike Neill

#### Lindstrom/RTP/USEPA/US

05/17/2010 07:29 AM

CC Laurence Libelo, Mark Strynar, Shoji Nakayama, adelinsk, Larry-RTP McMillan

bcc

Subject Re: DecaturBiosolids Application Rates

Mike,

Thank you very much.

This is exactly the information I was looking for. Also, thank you for the comments on the draft manuscript.

Now I'll be able to do some more analysis and see if there is anything more conclusive we can say about application rates and times and how that might influence PFC levels in the ground and surface water.

I hope to get another draft of this paper back to everyone soon.

Are there other people from your office or Region 4 who you think should be included as authors? Maybe you know of someone else who can help with the analysis or graphics. Please let me know what you think.

Thank you,

#### Andy

Mike Neill	Andy, Our data does support that there i	05/14/2010 10:41:48 AM
From: To: Cc: Date: Subject:	Mike Neill/R4/USEPA/US Andrew Lindstrom/RTP/USEPA/US@EPA Laurence Libelo/DC/USEPA/US@EPA, Mark Strynar/RTF 05/14/2010 10:41 AM DecaturBiosolids Application Rates	P/USEPA/US@EPA

#### Andy,

Our data does support that there is a surface run-off PFC transport mechanism. PFOA was measured at concentrations exceeding 388 ng/L in 13 of the 51 samples. Eleven of the 32 surface water samples detected PFOA at 388 ng/L or greater, and all those samples were collected from surface water associated with fields that received at least 16.3 DMT/acre of biosolids.

Attached are spreadsheets listing: application rates & samples, application rate and results, and farms priority spreadsheets.







Application Rates & samples.xls Fields, Application Rates & Results.xls Farms Priority Spreadsheet.xls

As far as the ground water contamination, we have documented that there is PFC contamination of ground water associated with the fields that received DU biosolids. However, our data is very limited because we do not know the well depths and ground water flow directions. Four of the nineteen well samples (W54PW, W12PW, W14PW and W60PW) have PFOA concentrations ranging from 149 ng/L to 6410 ng/L while two of the well samples (W14PW and W60PW) had concentrations of PFOS at 14.1 ng/L and 151 ng/L, respectively. I am not surprise to find PFOA in the ground water near the highest biosolids applied fields. PFOA was detected at concentrations ranging from 594 to 6410 ng/L in wells near fields

where > 20 dry metric tons/acre of biosolids had been applied. However, I am puzzled by the results for well sample W60PW. PFOA was detected at 149 ng/L and PFOS was detected at 151 ng/L in sample W60PW which was collected near a field which only received 3.9 DMT/acre of biosolids. That is the highest PFOS concentration detected of all 51 water samples collected and analyzed.

The two wells (W54PW and W12PW) with the highest PFC contamination are associated with field ALLW14 which had received the second highest amount of biosolids of 26.3 DMT/acre. Field ALLW 14 was one of the fields that was sample in 2007 with results indicating that PFCs were present in the  $\mu$ g/g range. Well W54PW is thought to be 50-60' deep and was a drinking water well. I do not have a well depth for W12PW.

Mike (706) 355-8614

Andrew Lindstrom/RTP/USEPA/US

02/24/2010 09:09 AM

To Peter Egeghy, Matthew Lorber

cc Mark Strynar, Amy Delinsky, Larry-RTP McMillan, Phillip Bost, Laurence Libelo

bcc

Subject PFOS exposure paper

Peter and Matt,

Congratulations. This is a very nice paper.

Your Conclusions section is worded very well. I especially appreciate the last sentence.

Thank you.

Andy



Andrew Lindstrom/RTP/USEPA/US

04/05/2010 07:40 AM

To Phillip Bost, Mark Strynar, adelinsk, Shoji Nakayama, Laurence Libelo

CC

bcc

Subject good papers











PFCs in seawater.pdf bob buck says.pdf JW says.pdf PFCs in Baltic sea.pdf PFC exposure form Ski Wax.pdf



PFCs in Fish in Germany.pdf

**Andrew** Lindstrom/RTP/USEPA/US

12/11/2009 07:34 AM

To Shoji Nakayama cc Mark Strynar, Amy Delinsky, Larry-RTP McMillan, Phillip

Bost, Laurence Libelo

bcc

Subject Re: SERDP

Shoji,

Here is a copy of our statement of ability for the AFFF proposal.



Statement of Ability.doc

Do we need to specify the intended approach? Has that been discussed yet?

Please let me know if I can help.

Thanks,

Andy

http://www.serdp.org/Funding/upload/E... 12/02/2009 02:12:01 PM Shoji Nakayama

From: Shoji Nakayama/CI/USEPA/US

Andrew Lindstrom/RTP/USEPA/US@EPA, Mark Strynar/RTP/USEPA/US@EPA To:

12/02/2009 02:12 PM Date:

**SERDP** Subject:

http://www.serdp.org/Funding/upload/ERSON-11-02%20PFOAS.pdf

\_\_\_\_\_

Shoji F. Nakayama, MD, PhD Phone: (513) 569-7490 Fax: (513) 569-7620

U.S. Environmental Protection Agency National Risk Management Research Laboratory 26 West Martin Luther King Drive, MS 190 Cincinnati, OH 45268

\_\_\_\_\_

**Andrew** Lindstrom/RTP/USEPA/US 04/12/2010 07:47 AM

To Shoji Nakayama, adelinsk, Jessica. Reiner, Laurence Libelo

CC

bcc

Subject Fw: UK PFC in food paper

Check out these papers from Dr. Don Clarke.

Good stuff.

Thanks,

#### Andy

---- Forwarded by Andrew Lindstrom/RTP/USEPA/US on 04/12/2010 07:45 AM -----

From: Don Clarke <Don.Clarke@fera.gsi.gov.uk>
To: Andrew Lindstrom/RTP/USEPA/US@EPA

Cc: Mark Strynar/RTP/USEPA/US@EPA, Peter Egeghy/RTP/USEPA/US@EPA

Date: 04/12/2010 05:00 AM Subject: Re: UK PFC in food paper

That and some others attached

Lindstrom.Andrew@epamail.epa.gov wrote:

```
> Dr. Clarke,
> I am very interested in your recent paper concerning PFCs in UK food
> samples (specified below).
> I would greatly appreciate it if you would send me a PDF version of this
> paper.
> Thank you very much,
> Andy
> Andrew B. Lindstrom, Ph.D.
> Exposure Measurements and Analysis Branch
> Human Exposure and Atmospheric Sciences Division
> National Exposure Research Laboratory
> U.S. Environmental Protection Agency
> Mail Drop E205-04
> Research Triangle Park, NC 27711
> Tel: 919-541-0551 Fax 919-541-3527
> email: lindstrom.andrew@epa.gov
> Food Addit Contam Part A Chem Anal Control Expo Risk Assess. 2010 Apr;27
> (4):530-45.
> Dietary intake estimate for perfluorooctanesulphonic acid (PFOS) and
> other perfluorocompounds (PFCs) in UK retail foods following
> determination using standard addition LC-MS/MS.
> Clarke DB, Bailey VA, Routledge A, Lloyd AS, Hird S, Mortimer DN, Gem M.
> Department for Environment, Food and Rural Affairs, Food and Environment
> Research Agency, York YO411LZ, UK. don.clarke@fera.gsi.gov.uk
> Abstract
```

```
> The analysis of 252 food samples (UK-produced and imported) purchased
> from a variety of retail outlets in the UK was undertaken for the
> presence of perfluorooctanesulphonic acid (PFOS), perfluorooctanoic acid
> (PFOA) and nine other perfluorocompounds (PFCs). A limit of
> quantification (LOQ) of 1 microg/kg was achieved for all target
> analytes, in all samples. Standard addition was used for quantification
> of PFC levels. All 11 of the targeted PFCs were detected in 75
> individual food items. In 70% of the samples, including all meat other
> than offal, none of the analytes were present above the LOD. The highest
 levels found were 59 microg/kg perfluorooctanesulphonic acid (PFOS) and
 63 microg/kg total PFCs (SigmaPFCs) in an eel sample, and 40 microg/kg
> PFOS (62 microg/kg SigmaPFCs) in a whitebait sample. The highest level
> in an offal sample was 10 microg/kg, in a wild roe deer liver. There
> were six samples with SigmaPFCs >15 microg/kg (fish, shellfish,
> crustaceans), a further seven samples with SigmaPFCs ranging 11-15
> microg/kg (including a liver), nine with SigmaPFCs ranging 6-10
> microg/kg (fish and livers), 31 with SigmaPFCs in the range 2-5
> microg/kg (including kidneys, popcorn and processed peas) and a further
> 22 with SigmaPFCs close to the LOD of 1 microg/kg (including eggs and
> potatoes). These concentrations indicate that UK consumers are being
> exposed to a low level of PFC contamination from food. The estimated
> upper bound dietary intake of 10 ng/kg bodyweight (bw)/day of PFOS for
> average adult consumers is well below the 0.15 microg (150 ng)/kg bw
> tolerable daily intake (TDI) set by the European Food Safety Authority.
> The lower bound adult dietary intake estimate of 1 ng/kg bw/day is
> similar to estimates undertaken and reported in countries such as
> Canada, Germany and Spain.
>
>
>
Regards
Don
Dr D B Clarke
Room 14GA05
Food and Environment Research Agency
Sand Hutton
YORK YO41 1LZ
Tel: (01904)462544
Fax: (01904)462111
```

English PFOS in food.pdf PFOS-Towards accuracy.pdf J of Fluorine chemistry -Fluorous.pdf

Andrew Lindstrom/RTP/USEPA/US 04/08/2010 03:41 PM

To Shoji Nakayama, Mark Strynar, Laurence Libelo

CC bcc

Subject



Andrew Lindstrom/RTP/USEPA/US 06/21/2010 02:22 PM

To Stefan.Posner

cc Christopher Lau, Mark Strynar, Laurence Libelo, Zhishi Guo, Shoji Nakayama

bcc

Subject Fw: A follow-up on PFAA Days III Symposium

Stefan,

Thank you very much for the links to these excellent reports. I will be forwarding this work to my colleagues here at EPA as I think they contain some especially useful information.





TA-2578\_2009 Swerea IVF.pdf TA-2562\_2009 Swerea IVF.pdf

You may have heard about the PFAA Days 3 conference that we recently held here at the EPA in Research Triangle Park. We had about 250 PFAA researchers from all over the world participating, and I think it turned out to it was a very productive and enjoyable meeting. The meeting website can be found here: http://www.epa.gov/nheerl/pfaa days 3/

As part of the follow up summary of the meeting, we are organizing special PFAA journal issues for both *Reproductive Toxicology* and *Environmental Science & Technology*. Please take a look at the email attached below for more details about this plan.

These special issues are directed toward all research that involves the PFAAs with the intent of summarizing the current state of our global understanding of this problem. I will be serving as one of the guest editors of the *ES&T* issue, and I invite you and your colleagues to submit manuscripts for these special focus editions of these journals. Given the excellent material presented in the reports you sent me, I am sure that you would be able to make a very strong contribution to this effort.

In any case, I hope to be able to meet you at SETAC in Portland this November. Please let me know if I can give more information or help in any way.

Thank you very much,

Andy

Andrew B. Lindstrom, Ph.D.

Exposure Measurements and Analysis Branch Human Exposure and Atmospheric Sciences Division National Exposure Research Laboratory U.S. Environmental Protection Agency

Mail Drop E205-04 Research Triangle Park, NC 27711

Tel: 919-541-0551 Fax 919-541-3527

email: lindstrom.andrew@epa.gov

#### ---- Forwarded by Andrew Lindstrom/RTP/USEPA/US on 06/21/2010 02:19 PM -----

From: Christopher Lau/RTP/USEPA/US@EPA
To: Andrew Lindstrom/RTP/USEPA/US@EPA

Date: 06/17/2010 06:27 PM

Subject: A follow-up on PFAA Days III Symposium

Dear Member of the PFAA Days Community:

We would like to thank you for your enthusiastic support and participation at the recent conference at EPA's campus in Research Triangle Park, NC. We hope that you found the meeting to be informative, interesting and productive, and that the experience will help your research and foster future collaborations. We especially wish to thank all of the session leaders and speakers who provided state-of-science overviews, and poster presenters who discussed their own research programs and findings.

While the meeting is over, there is still a great deal of work that needs to be done to summarize the outstanding research that was presented at the conference. We hope that you will join in with the plans to publish PFAA Days III-related research in either of the two special focus issues of Reproductive Toxicology or Environmental Science & Technology. As outlined below, these publications have different emphases and slightly different intentions regarding their PFAA Days special issues, so you should consider carefully which would be best for your contributions.

The Reproductive Toxicology special edition will consider research related to characterization of PFAA toxicity, elucidation of their modes and mechanisms of actions, description of pharmacokinetics and modeling, PFAA mixture effects, epidemiology, and human health risk analysis. In addition, we are seeking a couple of reviews or mini-reviews to summarize issues that are critical to the understanding of potential human and ecological health risks of the perfluorinated chemicals. All manuscripts will be subject to the normal peer-review process, with accepted papers being published immediately on-line at the journal website. The printed version of this special issue will be available in February or March in 2011. The guest editor of the Reproductive Toxicology special issue will be Chris Lau (lau.christopher@epa.gov).

The Environmental Science & Technology focus issue is intended to cover full length original research related to material presented at PFAA Days and any other original manuscripts related to current PFAA research. Papers should consider topics that involve fate and transport, reactivity, water and wastewater treatment, risk and exposure assessment in the environmental media, ecological toxicity, epidemiology, human and environmental health. The overall intention is to select approximately 25 publications that summarize the current state of global PFAA research as well as the most promising new developments in this field. Manuscripts for this special focus issue can be submitted to ES&T through the ACS Paragon Plus Environment website (https://acs.manuscriptcentral.com/acs), by selecting Environmental Science & Technology and indicating that you want to submit for the Perfluoroalkyl Acid special edition. Manuscripts will be subject to normal peer-review by the journal, with accepted material being published immediately as an ASAP article. The actual bound version of this special edition will be published no

later than October 2011. The guest editors (Mark Strynar (strynar.mark@epa.gov), Andy Lindstrom (lindstrom.andrew@epa.gov), and Laurence Libelo (libelo.laurence@epa.gov)) will be working with the managing editor to select manuscripts for this special issue.

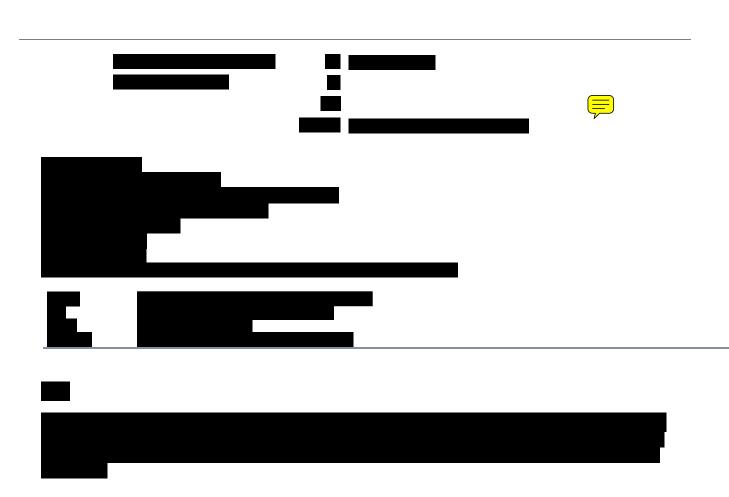
While the research presented at the PFAA Days III Symposium is our primary target for publication in these two special issues, it must be emphasized that other works related to PFAAs that are conducted by investigators who did not attend our meeting are also welcome. In that regard, please help us to draw attention from your colleagues to these special issues.

We also want to remind you that your comments about the conference are always welcome, with suggestions on how to improve future PFAA Days meetings being very important to us. Please send any feedback you may have directly to Chris Lau (lau.christopher@epa.gov).

Thanks again for helping to make this a very interesting and enjoyable meeting. We look forward to your continued support and participation in the PFAA Days community.

Best regards,

PFAA Days III Organizing Committee





### Bradley Grams/R5/USEPA/US

03/01/2010 10:33 AM

To Ellie Clark, Mary Dominiak, Toni Krasnic, Katherine Sleasman, Laurence Libelo

cc Cathy Fehrenbacher, Kay Austin

Subject Fw: FYI - Identifying New Persistent and Bioaccumulative Organics Among Chemicals in Commerce related to the Great lakes

FYI---



Identifying New Persistent and bioaccumulative organics among chemicals in commerce.pdf

Thanks!

Cheers,

Environmental Scientist

OPPTS Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

Land and Chemicals Division

Chemicals Management Branch, Toxics Section

77 West Jackson Boulevard (LC-8J)

Chicago, IL 60604

PHONE: (312) 886-7747 FAX: (312) 697-2527

E-MAIL: grams.bradley@epa.gov

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----- Forwarded by Bradley Grams/R5/USEPA/US on 03/01/2010 09:31 AM -----

**Bradley Grams/R5/USEPA/US** 

To Katherine Sleasman, Toni Krasnic

06/08/2010 06:22 PM

cc Laurence Libelo

bcc

Subject PFC Literature + Weblinks Request (Part One).

Hi Katherine and Toni:

This is part one of the literature search request, covering a Scirus pull of all PFC "black literature" (e.g., journal articles) and abstracts; I noted some proceedings hidden away, but this is a good start:



PFC Journal Articles & Abstracts.06.04.2010.v2.BRG.xls

Rachel will be supplying a fuller pull by next week Friday; I hope to have the website pull complete by then as well, along with the pABP review.

Thanks!

Cheers,

Environmental Scientist

OCSPP Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

Land and Chemicals Division

Chemicals Management Branch, Toxics Section

77 West Jackson Boulevard (LC-8J)

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#### Bradley Grams/R5/USEPA/US

To Laurence Libelo, Toni Krasnic, Katherine Sleasman

05/25/2010 04:07 PM

cc Kimberly Harris

bcc

Subject PFC Literature Pulls (April - May 2010)

Update/FYI. Feel free to pass on. For full publications, contact Rachel Delaney, out of EPA-Cincinnati.

PULL DATE	GENERAL/EXPOSURE	FATE/TRANSPORT	RISK ASSESSMENT
25 May 2010			
	PFCs and exposure 5-25-10.doc		
17 May 2010			
	PFCs and exposure 5-17-10.doc		risk assmt 5-17-10.doc
11 May 2010			
	PFCs and exposure 5-11-10.doc	fate and transport 5-11-10.doc	
3 May 2010			
	PFCs and exposure 5-3-10.doc		risk assmt 5-3-10.doc
26 April 2010			
	PFCs and exposure 4-26-10.doc		
19 April 2010	W		
	PFCs and exposure 4-19-10.doc		
12 April 2010	W		
	PFCs and exposure 4-12-10.doc		
5 April 2010	NONE	NONE	NONE

Environmental Scientist

OCSPP Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

Land and Chemicals Division

Chemicals Management Branch, Toxics Section

77 West Jackson Boulevard (LC-8J)

Chicago, IL 60604

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#### **Bradley Grams/R5/USEPA/US**

02/23/2010 03:02 PM

To Lee Thomas

cc Toni Krasnic, Laurence Libelo, Katherine Sleasman, Connie Roberts, Kimberly Harris

bcc

Subject Fw: Perfluorinated Compounds Research Pulls for Risk and

Exposure Assessment, Fate and Transport and

Remediation/Clean-up.

#### Hi Lee:

The Cincinnati library performed an abstract search for me on PFCs, and also specifically PFOA and PFOS, research related to (1) risk and exposure assessment, (2) fate and transport and (3) remediation/clean-up. This one goes back to 2006; however, we can also go back to the 1960's as needed, if that would assist ORD in crafting a "State of the Science" discussion.

Let me know what you think. Cincinnati can tailor research searches as well to other more specific topics. Additionally, they can perform weekly or monthly PFC literature sweeps across journals, to get updates for ORD and OPPTS, should that be helpful.

Thanks!

Cheers,

Environmental Scientist

OPPTS Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

Land and Chemicals Division

Chemicals Management Branch, Toxics Section

77 West Jackson Boulevard (LC-8J)

Chicago, IL 60604

PHONE: (312) 886-7747 FAX: (312) 697-2527

E-MAIL: grams.bradley@epa.gov

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#### ----- Forwarded by Bradley Grams/R5/USEPA/US on 02/23/2010 01:57 PM -----

From: Rachel Delaney/CI/USEPA/US

To: Bradley Grams/R5/USEPA/US@EPA
Date: 02/23/2010 01:54 PM

Subject: Re: Perfluorinated Compounds Research Pulls.

#### Hi Bradley,

Here are the results for the initial searches. Once you've had a chance to review the results, let me know if you have any questions or comments or feel like we are missing any topics or areas that we should cover. If everything looks good, I will begin updating these searches on Mondays with the PCB searches.







risk assmt 2-23-10.doc | cleanup and remediation 2-23-10.doc | fate and transport 2-23-10.doc

Thanks! Rachel

-----

Rachel Delaney
Reference Librarian
AWBERC Library
Contracted by ASRC Management Services
U.S. Environmental Protection Agency
26 W. Martin Luther King Drive
Cincinnati, Ohio 45268
(513) 569-7716
(513) 569-7709 fax

https://www.surveymonkey.com/s.aspx?sm=n4Slb8dq2D3fqQrD3701wg\_3d\_3d

Bradley Grams Thanks Rachel! That would be great. F... 02/23/2010 10:36:01 AM

From: Bradley Grams/R5/USEPA/US

To: Rachel Delaney/CI/USEPA/US@EPA

Date: 02/23/2010 10:36 AM

Thanks Rachel! That would be great.

For the initial search, if you could go back as far as feasible/able for you, that would be great. As for the breakouts, there probably would be the same breakouts of: (1) risk assessment (focusing on exposure), (2) fate and transport and (3) decontamination/remediation/clean-up (although most will likely fall into remediation, as the only decontamination method known is activated carbon).

Most of the work will likely fall under PFOS and PFOA, but is there a way to do a generic "perfluorochemicals" search (most researchers are considering a family of approx. 78, without clear distinction).

Thanks!

#### Cheers,

Bradley Randall Grams, B.Sc., B.A. Environmental Scientist

OPPTS Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

Land and Chemicals Division

Chemicals Management Branch, Toxics Section

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Rachel Delaney	Dear Bradley, I will set these searches	02/23/2010 07:09:39 AM
Bradley Grams	Hi Rachel: Is there anyway that you cou	02/22/2010 12:22:05 PM
Rachel Delaney	Hi Bradley, The results of your literature	02/22/2010 10:04:29 AM

## **Bradley Grams/R5/USEPA/US** 03/29/2010 10:32 AM

- To Toni Krasnic, Katherine Sleasman, Clive Davies, Laurence Libelo, Laura Nazef
- C Anton Martig, Kathy Davey, Erin Newman, Kimberly Harris, Mardi Klevs, Phil Kaplan, Sheila Batka, Jerri-Anne Garl

bcc

Subject National Association of Surface Finishers' Pilot PFC Workplan for Minnesota Metal Finishers.

FYI- See below message from the National Association of Surface Finishers (NASF); NASF is seeking to link a PFC risk management plan to concurrent P2-related energy and water conservation programs.



Water and Energy conservation practices are attached here: MP&M P2 Alternatives.doc The PFC pilot project is below.

Please let me know your thoughts. Any comments are very much appreciated!

Thanks!

Cheers,

Bradley Randall Grams, B.Sc., B.A.

Environmental Scientist

OPPTS Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

Land and Chemicals Division

Chemicals Management Branch, Toxics Section

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----- Forwarded by Bradley Grams/R5/USEPA/US on 03/29/2010 09:22 AM -----

From: "Christian Richter" <crichter@thepolicygroup.com>

To: Erin Newman/R5/USEPA/US@EPA

Cc: Bradley Grams/R5/USEPA/US@EPA, Kimberly Harris/R5/USEPA/US@EPA

Date: 03/26/2010 02:34 PM

Subject: re: Minnesota Issue/Pilot Workplan

Hello Erin, Brad and Kim:

While I await our folks' final suggestions and sign off on commitments for the industry, may I take the liberty of sharing a draft of the pilot project proposal so we can accelerate once I get some brief feedback from your team. I would greatly appreciate it.



Sustainable Technology Partnership.doc

Best regards,

Christian Richter

From: Newman.Erin@epamail.epa.gov

**Sent**: Thursday, March 25, 2010 5:46 PM

To: crichter@thepolicygroup.com

Subject: Minnesota Issue/Pilot Workplan

#### Hi Christian:

I just wanted to give you a heads up. We heard from MPCA today that they have done additional PFC sampling with at least one chrome plater in the Twin Cities area and they have some hits. This information may be publically released at some point, but I have no details nor can I comment further on the issue.

I have concerns that our window of opportunity to work voluntarily with Minnesota could close at some point. Additionally, we may be too late soon to create the "positive story" that I believe your industry would like to share. EPA won't be able to say much if we haven't come to agreement on a pilot effort, etc.

It would be extremely helpful to us in the Region to hear confirmation from your organization that the Twin Cities platers are interested in working on a voluntary pilot and a time frame of we could see a written description of that work.

I'm out tomorrow, but will be back in on Monday.

Best, Erin

\*\*\*\*\*\*\*\*\*\*

Erin W. Newman **Environmental Scientist** 

U.S. EPA 77 West Jackson Blvd. (AR-18J) Chicago, IL 60604 newman.erin@epa.gov (T): 312-886-4587 (F): 312-692-2465

> Bradley Grams/R5/USEPA/US 04/06/2010 12:20 PM

- To Toni Krasnic, Katherine Sleasman, Clive Davies, Laurence Libelo, Laura Nazef
- cc Anton Martig, Kathy Davey, Mardi Klevs, Phil Kaplan, Sheila Batka, Jerri-Anne Garl

bcc

Subject Fw: Amended National Association of Surface Finishers' Pilot PFC Workplan for Minnesota Metal Finishers (w/ EPA Region 5 and Minnesota PCA Amendments).

FYI, see below and attachments.

NASF has made some amendments to their PFC pilot plan; however, Region 5, and Minnesota's Pollution

Control Agency, Department of Health and Technical Assistance Programs have some further comments. If you have any comments, amendment/addition requests, etc., please feel free to let me know.

Also, please note that the P2 and Water conservation projects are provided for non-PFC facilities who would like to engage with the State, but do not have a PFC issue, and as an addendum for PFC-users who would like to attach other State priorities to the project.

#### Thanks!

#### Cheers.

Bradley Randall Grams, B.Sc., B.A.

Environmental Scientist

OPPTS Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

Land and Chemicals Division

Chemicals Management Branch, Toxics Section

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----- Forwarded by Bradley Grams/R5/USEPA/US on 04/06/2010 10:59 AM -----

From: "Christian Richter" < crichter@thepolicygroup.com>

To: Erin Newman/R5/USEPA/US@EPA

Cc: Bradley Grams/R5/USEPA/US@EPA, Kimberly Harris/R5/USEPA/US@EPA

Date: 04/06/2010 08:17 AM

Subject: Sustainable Technology Partnership - Revised Draft

#### Erin, Brad, Kim:

Thanks or reviewing the earlier draft. I have incorporated nearly all changes and believe the project is ambitious in its scope even as the number of potential facilities in Minnesota is modest. We view this - and collectively we state as much in the draft - as laying the groundwork for a broader, multi-state (and potentially nationwide) partnership with EPA. The industry is ready to do this. To take this a step further in MN, our folks last week discussed funding / resources with MPCA staff.

A note on two of the more significant substantive items:

- (1) Measurement toward achieving goals I have included language that allows us to confer initially to establish appropriate metrics for evaluating progress. The most important element here, of course, is eliminating its use in facilities and demonstrating that over a specific period of time concentrations fall significantly. There are cost and time barriers to using some of the metrics we've discussed, so let's address which other metrics are most appopriate and feasible as we get started.
- (2) Chromic Acid Etch Erin, you mentioned that you have been made aware that one of the Twin Cities companies involved here is applying non-long chain PFCs in a chromic acid etch process. This is a new

development for us, and an issue we discussed in Minneapolis when I facilitated our industry meeting with MSES. During that meeting, there was some question as to whether using the available substitutes in chromic acid etch baths was feasible, effective and did not damage the quality of the bath. We are discussing this issue with the key chemical processors in the association to get a better assessment in the meantime, so we're approaching this as an iterative process.

(3) Water Conservation and P2 - some of our folks would view this element one of you suggested for non-Cr processes as beyond the scope of the project, but I've put it in anyway so we might have the opportunity to address this together.

In the meantime, reach me and we can discuss any other matters related to the draft and go forward.

Thanks and best regards,

Christian

From: Newman.Erin@epamail.epa.gov Sent: Monday, April 05, 2010 10:38 AM

To: "Christian Richter" < crichter@thepolicygroup.com>

Subject: MPCA Data Release

Hi Christian:

I'm on the phone with MPCA's PFC management. MPCA is releasing Lake Calhoun PFC data this week. Can we get a new draft to MPCA today or tomorrow? Even if it's not done? They sound willing to include language in their press release about the pilot and working proactively with industry on this issue, etc., but are eager to see the next draft right away.

Also, if you want to have a section on "Roles" for each organization, I think MPCA will be happy to fill in their own roles.

I didn't realize until today that the facility with issues in the Twin Cities area was chrome etch. Hmmh.

Erin





STP Clean Draft.doc Sustainable+Technology+Partnership+R5+Comments[1].doc

Bradley Grams/R5/USEPA/US

06/14/2010 02:34 PM

To Toni Krasnic, Katherine Sleasman

cc Laurence Libelo

bcc

Subject Fw: May 2010 Ohio River Sampling Trip Report

#### FYI-

To: Kimberly Harris/R5/USEPA/US@EPA

From: Lee Thomas/R4/USEPA/US Date: 06/14/2010 01:29PM

cc: Bradley Grams/R5/USEPA/US@EPA

Subject: May 2010 Ohio River Sampling Trip Report

Kim,

It was nice to meet you last week.

The Ohio River Sampling Trip Report was in my in-box this morning. I am forwarding a copy to you.

(See attached file: May 2010 Sampling Trip Report.PDF)

Lee Thomas thomas.lee@epa.gov 404.562.9786 Ground-Water Hydrologist Water Protection Division United States Environmental Protection Agency, Region 4 61 Forsyth Street Atlanta, GA 30303

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May 2010 Sampling Trip Report.PDF

#### Bradley Grams/R5/USEPA/US

03/31/2010 11:55 AM

- To Toni Krasnic, Katherine Sleasman, Laurence Libelo
- cc Lee Thomas, Anton Martig, Mardi Klevs, Erin Newman, Kimberly Harris, Edwin Smith, Cathy Fehrenbacher, Rachel Delaney

bcc

Subject PFC Literature Pulls (Abstracts 2006 - March 2010).

Hi Toni, Katherine and Laurence:

Here are the PFC abstract pulls completed by EPA Cincinnati from mid-February through March, 2010.







2006 - Mid-February 2010:

risk assmt 2-23-10.doc | cleanup and remediation 2-23-10.doc | fate and transport 2-23-10.doc





Late February - March 2, 2010: risk assmt 3-2-10.doc PFCs and exposure 3-2-10.doc

W

March 2, 2010 - March 25, 2010:

risk assmt 3-25-10.doc





March 25, 2010 - March 31, 2010:

PFCs and exposure 3-31-10.doc fate and transport 3-31-10.doc

(Thanks to Rachel Delaney in Cincinnati for all of her assistance with this!)

Questions? Feel free to call or e-mail.

Thanks again all!

Cheers.

Bradley Randall Grams, B.Sc., B.A.

Environmental Scientist

OPPTS Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

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Brian Englert/DC/USEPA/US

To John Washington, Laurence Libelo

03/16/2010 07:37 AM

cc bcc

Subject sulfonamido compounds

Laurence,

Again, thanks for the slides yesterday.

I may have some interest in looking at a few additional analytes during our ongoing methods work.

These include the following sulfonamido compounds: 2-(N-ethyl perfluorooctane sulfonamido) acetic acid (N-EtFOSAA), 2-(N-methyl perfluorooctane sulfonamido) acetic acid (N-MeFOSAA), perfluorooctane sulfonamide (FOSA), perfluorooctane sulfonamidoacetate (FOSAA), N-methyl perfluorooctane sulfonamido ethanol (N-MeFOSE), 2-N-ethylperfluorooctane sulfonamido ethanol (NEtFOSE), 2-N-methylperfluorooctane sulfonamido ethanol (NMeFOSE).

Based on publications by Jennifer fields and Chris Higgins, these compounds can be found in very high concentrations in biosolids.

I can't find a good article that deals with the source of these compounds. I know FOSA is used in Scotchgard. Do either of you know if the other compounds are formed in the environment or are used in PFC containing products.

Any references or information you have would be much appreciated.



es048245p.pdf Mellissas fluorochem MASS FLOW.pdf

Brian Englert, Ph.D. Environmental Scientist U.S. EPA, Engineering & Analytical Support Branch Engineering and Analysis Division Office of Science and Technology, Office of Water 1200 Pennsylvania Avenue NW (4303T) Washington, D.C. 20460 Phone: 202-566-0754, FAX: 202-566-1053 http://www.epa.gov/waterscience englert.brian@epa.gov

Mail, FedEx, UPS, etc: 1301Constitution Avenue Rm. 6231AA (Connecting Wing) Washington, DC 20004

> Cathy Fehrenbacher/DC/USEPA/US 03/25/2010 12:57 PM

To Benjamin Bahk, brian.mabry, Bryn.Burkard, Carol.Blake, Catalina. Yee, Cathy Fehrenbacher, Charles. N. Gaiser, Cindy Roberts, Cindy.N.Ragin, Connie Roberts, cqw9, Curtis.wallis, David Parker, David.Goldman, Dennis Utterback, Diane Sheridan, Diego.M.Fridmann, Douglas Parsons, Edward Ohanian, Elizabeth Doyle, Emily Smith, Eric Weber, Gail Mitchell, Gary. Stronski, gomez-taylor. maria, Jack Jones, Jacqueline McQueen, Jan Pickrel, Jim Giattina, Jim Willis, John.Johnston, John.Mccurdy, Jonathan.T.Zack, Joyce Donohue, Ken. Dobson, Kerry. Dearfield, Larry. hortert, Laurence Libelo, MacArthur Long, Margaret Kroening, Marna McDermott, Michael Hom, Neil.Gaffney, Patty.Bennett, paul.south, Phil Oshida, Randall.L.Crom, Randy.robertson, Robert Lee, Ross Highsmith, roufaeal.alia, Roy Fortmann, Steven.N.Finch, Suzanne Rubini, Suzanne Rudzinski, Thomas Carpenter, Toni Krasnic, William Bush

cc Latisha Petteway, Melissa Anley-Mills

bcc

Subject FYI: ORD Publication of Manuscript on PFCs in Fish from Minnesota

Hi everyone. We wanted to bring your attention to an ORD publication which is currently available on-line in the ES&T Articles ASAP section. The ORD publication "Geographical Distribution of Perfluorinated Compounds in Fish from Minnesota Lakes and Rivers - Amy D. Delinsky, Mark J. Strynar, Patricia J. McCann, Jerry L. Varns, Larry McMillan, Shoji F. Nakayama and Andrew B. Lindstrom has been chosen by the managing editor at Environmental Science and Technology (ES&T) to highlight Earth Day-relevant research because April 2010 is the 40th anniversary of Earth Day. Special attention will be called to this publication in the Managing Editors Comments (MEC) section of the journal in the April 1st, 2010 issue. The Managing Editor's Comments are among ES&Ts most frequently read papers, so this notation will have extra attention drawn to our article.

Attached is a copy of the paper, and the abstract.





Delinsky et al., 2010 ASAP ES&T.pdf PFCs in MN Fish Abstract.doc

Should you get questions from the press or others about this article, please refer them to LaTisha (Tisha) Petteway ((202) 564-3191), or Melissa Anley-Mills ((202)-564-5179).

Cathy Fehrenbacher, CIH, Chief Exposure Assessment Branch USEPA/Office of Pollution Prevention and Toxics 1200 Pennsylvania Ave., N.W. (7406M) Washington, DC 20460

Phone: 202-564-8551 Fax: 202-564-8892

Deliveries: Room 5102A EPA East Building 1201 Constitution Avenue, N.W. Washington, DC 20004

### Cathy Fehrenbacher/DC/USEPA/US

02/24/2010 10:31 AM

- To Jim Willis, Diane Sheridan, Toni Krasnic, Katherine Sleasman
- CC Jennifer Seed, Laurence Libelo, Robert Lee, Neil Patel, Kay

bcc

Subject Fw: ORD publication on exposure to PFOS - published Feb

#### see below

Cathy Fehrenbacher, CIH, Chief Exposure Assessment Branch USEPA/Office of Pollution Prevention and Toxics 1200 Pennsylvania Ave., N.W. (7406M) Washington, DC 20460 Phone: 202-564-8551

Fax: 202-564-8892

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----- Forwarded by Cathy Fehrenbacher/DC/USEPA/US on 02/24/2010 10:30 AM -----

From: Matthew Lorber/DC/USEPA/US

To: Gina Perovich/DC/USEPA/US@EPA, David Bussard/DC/USEPA/US@EPA, Cathy

Fehrenbacher/DC/USEPA/US@EPA, Lynn Flowers/DC/USEPA/US@EPA

Cc: Peter Egeghy/RTP/USEPA/US@EPA

Date: 02/24/2010 09:16 AM

Subject: ORD publication on exposure to PFOS

Addressees - The ORD study on exposure to PFOS was published on-line at the Journal of Exposure Science and Environmental Epidemiology on February 10. Matt Lorber



Egeghy&Lorber--PFOS.pdf

Cathy Fehrenbacher/DC/USEPA/US

01/22/2010 12:05 PM

To KarenD Johnson

cc Laurence Libelo, Deborah Sherer

bcc

Subject Fw: Final DuPont Parkersburg, WV PFOA Peer Consultation

Panel Report & DuPont Response - Request your input by

February 8

Hi Karen. As a follow up to the PFC National Issues call earlier this week, I'd like to get input from the Regions on the Agency response to DuPont's response to the Peer Consultation Group's report provided under the MOU that we have with DuPont on the Parkersburg, WV facility.

We previously reviewed the Peer Consultation Panel report, and responded to DuPont that we agreed with the panel. DuPont sent a response which we'd like your input on by February 8. We need to respond back to DuPont by February 18. Because this is an MOU, we cannot require them to do additional work, but they have agreed to a Phase III, and we will need to negotiate the terms of the Phase III monitoring with them. You will see that they are proposing some additional work on locally grown produce and milk, but do not plan to do any of the other work proposed by the Peer Consultation Group.

I'm attaching DuPont's response to the report, and the initial Peer Consultation Group's report is below.

Attached is a single pdf of the entire submission.



DuPont 12-18-09 PFOA OPPT-2004-0113.pdf

Thanks in advance for your help with this.

Cathy Fehrenbacher, CIH, Chief Exposure Assessment Branch USEPA/Office of Pollution Prevention and Toxics 1200 Pennsylvania Ave., N.W. (7406M) Washington, DC 20460 Phone: 202-564-8551 Fax: 202-564-8892

Deliveries:

Room 5102A EPA East Building 1201 Constitution Avenue, N.W. Washington, DC 20004

---- Forwarded by Cathy Fehrenbacher/DC/USEPA/US on 01/22/2010 11:47 AM -----

"Mitchell Small" <ms35@andrew.cmu.edu> From:

"Mitchell Small" <ms35@andrew.cmu.edu>, "Michael McLachlan" To:

<michael.mclachlan@itm.su.se>, "Lee, Linda S" <lslee@purdue.edu>, "'Rosalind Schoof" 
<rschoof@integral-corp.com>, "Paul Lioy" <pli>plioy@eohsi.rutgers.edu>, 
<jebaker@u.washington.edu>, <kkannan@wadsworth.org>, <smabury@chem.utoronto.ca>,

<twatson@bnl.gov>

Cc: "'Andrea V Malinowski" < Andrea. V. Malinowski@USA.dupont.com>, Cathy

Fehrenbacher/DC/USEPA/US@EPA, "'Andrew S Hartten'" < Andrew.S. Hartten@usa.dupont.com>,

"David W Boothe" < David.W.Boothe@USA.dupont.com>, "Doris W Duffy"

<Doris.W.Duffy-1@usa.dupont.com>, Marna McDermott/DC/USEPA/US@EPA, "Kan Shao"

<kshao@andrew.cmu.edu>, "'Gloria Dadowski"' <dadowski@andrew.cmu.edu>

Date: 07/15/2009 01:41 PM Subject: Final PFOA PCP Report

Enclosed is the final PCP report. We will formally submit (to EPA) and post this tomorrow (on the web site), unless we hear from someone that there is a typo. I also enclose a markup of the only section where somewhat substantive edits were made.

Thank you all,

Mitch Small

Mitchell J. Small

H. John Heinz III Professor of Environmental Engineering

Carnegie Mellon University Civil & Environmental Engineering and Engineering & Public Policy

Porter Hall 119, Frew Street, Pittsburgh PA 15213,

ms35@andrew.cmu.edu tel: 412-268-8782 fax: 412-268-7813





Final\_Report\_PFOA\_July 16.doc Revised Section 3\_3\_2\_2.doc

Cathy Fehrenbacher/DC/USEPA/US

12/29/2009 03:57 PM

To Laurence Libelo, Deborah Sherer

CC

bcc

Subject Fw: DuPont Response to PCP & EPA MOU Feedback

#### see below

Cathy Fehrenbacher, CIH, Chief Exposure Assessment Branch USEPA/Office of Pollution Prevention and Toxics 1200 Pennsylvania Ave., N.W. (7406M) Washington, DC 20460

Phone: 202-564-8551 Fax: 202-564-8892

Deliveries:

Room 5102A EPA East Building 1201 Constitution Avenue, N.W. Washington, DC 20004

---- Forwarded by Cathy Fehrenbacher/DC/USEPA/US on 12/29/2009 03:56 PM -----

Re: Fw: DuPont Response to PCP & EPA MOU Feedback

Mike Mattheisen to: Gerry Brown, Cathy Fehrenbacher 12/28/2009 09:59 AM

Cc: Paul Campanella, Victoria Vanroden

Attached is a single pdf of the entire submission.



DuPont 12-18-09 PFOA OPPT-2004-0113.pdf

Mike Mattheisen Associate Branch Chief Chemical Information and Testing Branch Chemical Control Division US EPA Office of Pollution Prevention and Toxics 202-564-3077

Gerry Brown Since I will be off until the New Year sta... 12/22/2009 08:54:20 AM

From: Gerry Brown/DC/USEPA/US

To: Paul Campanella/DC/USEPA/US, Mike Mattheisen/DC/USEPA/US

Cc: Cathy Fehrenbacher/DC/USEPA/US

Date: 12/22/2009 08:54 AM

Subject: Fw: DuPont Response to PCP & EPA MOU Feedback

Since I will be off until the New Year starting around noon today and since you guys are acting this and next week, could you keep an eye out for this Fedex package from Dupont.

#### Thanksl

---- Forwarded by Gerry Brown/DC/USEPA/US on 12/22/2009 08:51 AM -----

From: Cathy Fehrenbacher/DC/USEPA/US

To: David W Boothe < David.W.Boothe@USA.dupont.com>

Cc: Andrea V Malinowski < Andrea.V.Malinowski@USA.dupont.com>, Andrew S Hartten

<a href="mailto:</a><a href="mailto:Andrew.S.Hartten@usa.dupont.com">Mailto:Andrew.S.Hartten@usa.dupont.com</a>, Gerry Brown/DC/USEPA/US@EPA, Victoria

Vanroden/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Deborah

Sherer/DC/USEPA/US@EPA

Date: 12/22/2009 08:30 AM

Subject: Re: DuPont Response to PCP & EPA MOU Feedback

Thanks Dave. I appreciate the heads' up on this. I hope you and others we've been working with at DuPont have a happy holiday as well!

Gerry, Victoria - FYI. Please send a copy to me when this is received.

#### Thanks everyone!

Cathy Fehrenbacher, CIH, Chief Exposure Assessment Branch USEPA/Office of Pollution Prevention and Toxics 1200 Pennsylvania Ave., N.W. (7406M) Washington, DC 20460 Phone: 202-564-8551

Fax: 202-564-8892

Deliveries:

Room 5102A EPA East Building 1201 Constitution Avenue, N.W. Washington, DC 20004

David W Boothe Cathy, For your information, we are sh... 12/18/2009 05:09:29 PM

From: David W Boothe < David.W.Boothe@USA.dupont.com>

To: Cathy Fehrenbacher/DC/USEPA/US@EPA

Cc: Andrea V Malinowski < Andrea. V. Malinowski @USA.dupont.com>, Andrew S Hartten

<Andrew.S.Hartten@usa.dupont.com>

Date: 12/18/2009 05:09 PM

Subject: DuPont Response to PCP & EPA MOU Feedback

#### Cathy,

For your information, we are shipping by FedEx the subject response document to Director, Chemical Control Division and to the Document Control Office today, Dec. 18 (scheduled due date, Dec. 23). Please advise if you have any questions.

Happy Holidays!

Happy Holidays Dave Boothe DuPont

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Francais Deutsch Italiano Espanol Portugues Chinese Japanese Korean

http://www.DuPont.com/corp/email\_disclaimer.html

Cathy Fehrenbacher/DC/USEPA/US 02/17/2010 09:40 AM

To Laurence Libelo, Deborah Sherer

cc Toni Krasnic, Katherine Sleasman, Diane Sheridan

bcc

Subject Fw: A Time Trend Study of Significantly Elevated

Perfluorocarboxylate Levels in Humans after Using Fluorinated Ski Wax

Cathy Fehrenbacher, CIH, Chief **Exposure Assessment Branch** USEPA/Office of Pollution Prevention and Toxics 1200 Pennsylvania Ave., N.W. (7406M) Washington, DC 20460 Phone: 202-564-8551

Fax: 202-564-8892

Deliveries:

Room 5102A EPA East Building 1201 Constitution Avenue, N.W. Washington, DC 20004

----- Forwarded by Cathy Fehrenbacher/DC/USEPA/US on 02/17/2010 09:40 AM -----

From: Jennifer Seed/DC/USEPA/US

To: Christopher Lau/RTP/USEPA/US@EPA, Andrea Pfahles-Hutchens/DC/USEPA/US@EPA, Cathy

Fehrenbacher/DC/USEPA/US@EPA

Date: 02/17/2010 08:31 AM Subject: Fw: A Time Trend Study of Significantly Elevated Perfluorocarboxylate Levels in Humans after

Using Fluorinated Ski Wax

#### heres a new one

---- Forwarded by Jennifer Seed/DC/USEPA/US on 02/17/2010 08:30 AM -----

From: Maurice Zeeman/DC/USEPA/US

To: Jennifer Seed/DC/USEPA/US@EPA, Oscar Hernandez/DC/USEPA/US@EPA
Cc: Bob Morcock/DC/USEPA/US@EPA, Sara Pollack/DC/USEPA/US@EPA, Jeffrey
Gallagher/DC/USEPA/US@EPA, Donald Rodier/DC/USEPA/US@EPA, Mark

Townsend/DC/USEPA/US@EPA, Amy Benson/DC/USEPA/US@EPA, Meena Sonawane/DC/USEPA/US@EPA, Maria Szilagyi/DC/USEPA/US@EPA

Date: 02/17/2010 08:28 AM

Subject: A Time Trend Study of Significantly Elevated Perfluorocarboxylate Levels in Humans after Using

Fluorinated Ski Wax

Dear Jennifer & Oscar,

The above titled preprint from Swedish researchers is just online for future publication in ES&T.

Seemed sort of "should we really care?" until found the following in their abstract:

"The PFOA levels in three technicians with "low" initial levels of PFOA (<10.0 ng/mL in preseason blood) increased by 254, 134, and 120%, whereas five technicians with "high" initial levels (>100 ng/mL in preseason sample) were at steady state. PFHxA is suggested to have a short half-life in humans relative the other perfluorocarboxylates. The levels of perfluorosulfonates were unaffected by the wax exposure."

Yours,

Maurice





ES&T 44(x) online Feb 16th; 2010 (PFCs-humans-skiwax).pdf ES&T 44(x) online Feb 16th; 2010 (PFCs-humans-supp).pdf

Maurice Zeeman, Ph.D. Senior Scientist US-EPA/OPPT/RAD 1201 Constitution Ave., NW Washington, DC 20460 202-564-7617 (P)

Cathy Fehrenbacher/DC/USEPA/US

03/17/2010 04:36 PM .

To Laurence Libelo

cc Robert Lee

bcc

Subject Fw: City of Cincinnati PFOA Data

Hi Laurence. Please handle this.

#### Thanks!

Cathy Fehrenbacher, CIH, Chief Exposure Assessment Branch USEPA/Office of Pollution Prevention and Toxics 1200 Pennsylvania Ave., N.W. (7406M) Washington, DC 20460 Phone: 202 564 8551

Phone: 202-564-8551 Fax: 202-564-8892

Deliveries:

Room 5102A EPA East Building 1201 Constitution Avenue, N.W. Washington, DC 20004

----- Forwarded by Cathy Fehrenbacher/DC/USEPA/US on 03/17/2010 04:36 PM -----

From: "Linda Aller" <a href="mailto:slaller@bennettandwilliams.com">linda Aller <a href="mailto:slaller@b

Date: 03/17/2010 04:34 PM Subject: City of Cincinnati PFOA Data

#### Cathy:

I was reading the March 3, 2010 USEPA Comments to DuPont on the latest MOU product. On page 7 of that document, elevated PFOA concentrations sampled in the Cincinnati Water Works are referenced. Can you refer me to the source of the data and concentrations?

Thanking you in advance.

Linda Aller

Linda Aller

Bennett & Williams

98 County Line Road West, Suite C

Westerville, OH 43082

(614)882-9122 ext. 135

cell (614)361-0153





winmail.dat message\_body.rtf

Cathy Fehrenbacher/DC/USEPA/US

06/18/2010 01:36 PM

To Michael Bellot cc David Lynch

bcc

Subject Fw: Adaptation of EPA Athens Methods - will call you on Monday about the SEP

Hi Mike. Received your voice message and will talk to Dave today about where we are. Dave has told me the technical call yesterday was productive and the document below is presumably the result of that discussion. We'll review it and get back to you.

I'll send you an appt. and hopefully we can talk Monday. I am out the rest of the week on vacation but Dave will be here and can help with any questions you may have while I'm out. Dave worked hand in hand with Mark on the SEP.

#### Thanks

Cathy Fehrenbacher, CIH, Chief Exposure Assessment Branch USEPA/Office of Pollution Prevention and Toxics 1200 Pennsylvania Ave., N.W. (7406M) Washington, DC 20460 Phone: 202 564 8551

Phone: 202-564-8551 Fax: 202-564-8892

#### Deliveries:

Room 5102A EPA East Building 1201 Constitution Avenue, N.W. Washington, DC 20004

----- Forwarded by Cathy Fehrenbacher/DC/USEPA/US on 06/18/2010 01:32 PM -----

From: "Ed Schaefer" < ESCHAEFE@WILDLIFEINTERNATIONAL.COM>

To: "William R Berti" < William.R.Berti@USA.dupont.com>, "Barbara S Larsen"

<Barbara.S.Larsen@USA.dupont.com>, Cathy Fehrenbacher/DC/USEPA/US@EPA, Greg

Fritz/DC/USEPA/US@EPA, Mark Garvey/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, David Lynch/DC/USEPA/US@EPA, "Robert C Buck"

<Robert.C.Buck@USA.dupont.com>, "Robert J Tucker" <Robert.J.Tucker@USA.dupont.com>,

John Washington/ATH/USEPA/US@EPA

Cc: "David Weiss" <dweiss@WILDLIFEINTERNATIONAL.COM>, "Ray VanHoven"

<RVANHOVE@WILDLIFEINTERNATIONAL.COM>, "Will Nixon"

<WNIXON@WILDLIFEINTERNATIONAL.COM>

Date: 06/18/2010 01:24 PM

Subject: Adaptation of EPA Athens Methods

#### Dear All,

The attached method procedure summary describes the work that will be conducted as a result of our discussions over the past few days. We are currently scheduled to start this work on 21 June 2010 and would greatly appreciate receiving any comments as soon as possible. Once again, we would like to thank everyone involved for their input and participation in these helpful discussions.

With kind regards, Ed Schaefer

# Wildlife International



Cathy Fehrenbacher/DC/USEPA/US

12/04/2009 02:04 PM

To Patrice Borsz

cc John Washington, Marna McDermott, Scott Sherlock, David Lynch, Laurence Libelo, Ed Gross, Cathy Murphy

bcc

Subject Fw: TRP Amendment to FOIA Request HQ-RIN-01866-09

Hi Patrice. As you know, TRP has amended their FOIA request to exclude all of the Clariant CBI documents. With this clarification, OPPT has delivered all of the documents which are responsive and releasable for this FOIA. Should you have any questions or need assistance in completing this FOIA, please let me know.

Have a great weekend!

Cathy Fehrenbacher, CIH, Chief Exposure Assessment Branch USEPA/Office of Pollution Prevention and Toxics 1200 Pennsylvania Ave., N.W. (7406M) Washington, DC 20460 Phone: 202 564 8551

Phone: 202-564-8551 Fax: 202-564-8892

Deliveries:

Room 5102A EPA East Building 1201 Constitution Avenue, N.W. Washington, DC 20004

---- Forwarded by Cathy Fehrenbacher/DC/USEPA/US on 12/04/2009 01:57 PM -----

From: Scott Sherlock/DC/USEPA/US
To: Ed Gross/DC/USEPA/US@EPA

Cc: Cathy Fehrenbacher/DC/USEPA/US@EPA

Date: 12/04/2009 01:42 PM

Subject: Fw: TRP Amendment to FOIA Request HQ-RIN-01866-09

FYI. The intended effect of this is to exclude all the Clariant CBI documents. Hence no CBI review.

Scott M. Sherlock, Attorney Advisor Environmental Assistance Division Office of Pollution Prevention and Toxics 202.564-8257 (telephone) 202.564-8251 (facsimile) sherlock.scott@epa.gov (e-mail)

---- Forwarded by Scott Sherlock/DC/USEPA/US on 12/04/2009 01:41 PM -----

From: Katie Smythe <ksmythe@mindspring.com>
To: Patrice Borsz/RTP/USEPA/US@EPA
Cc: Scott Sherlock/DC/USEPA/US@EPA

Date: 12/04/2009 11:34 AM

Subject: TRP Amendment to FOIA Request HQ-RIN-01866-09

#### Patrice,

Attached is a letter from TRP amending the FOIA request HQ-RIN-01866-09 (submitted 18-Aug-09) to EXCLUDE any documents claimed as CBI by Clariant. Scott Sherlock has been copied on this amendment letter since he has been interacting with Clariant on this issue.

If you have any questions about the modification to the FOIA request, please do not hesitate to contact me. We look forward to receiving the next batch of FOIA-related documents.

Best regards,



Katie TRP FOIA Request Amendment (3-Dec-09).pdf

Cathy
Fehrenbacher/DC/USEPA/US

To "Dr. Laurence Libelo"

02/05/2010 08:06 AM

cc bcc

Subject Fw: SOT PFOA in NJ Drinking Water Poster

## Kay Austin

---- Original Message ----- From: Kay Austin

**Sent:** 02/04/2010 05:16 PM EST

To: Cathy Fehrenbacher

Subject: Fw: SOT PFOA in NJ Drinking Water Poster

see below

H. Kay Austin, Ph.D., Associate Director Economics, Exposure and Technology Division Office of Pollution Prevention and Toxics U.S. Environmental Protection Agency (7406-M) 1200 Pennsylvania Ave., NW Washington, DC 20460 (202) 564-2695 office; (202) 247-6410 cell (202) 564-8770 IO Main; (202) 564-8892 fax

----- Forwarded by Kay Austin/DC/USEPA/US on 02/04/2010 05:16 PM -----

From: Mark Maddaloni/R2/USEPA/US
To: Kay Austin/DC/USEPA/US@EPA
Cc: Pat Evangelista/R2/USEPA/US@EPA

Date: 02/04/2010 05:05 PM

Hi Kay,

Thought I'd pass along a name and a poster. My colleague, Gloria Post at NJDEP, has done a lot of work on PFCs. I'm sure she would be a valued addition to the Workshop if you're extending invitations beyond the EPA family. Speaking of families, your poor cousins out here in the Regions are always begging for travel funds. Are there any available for attending this Workshop? Thanks.

----- Forwarded by Mark Maddaloni/R2/USEPA/US on 02/04/2010 04:57 PM -----

"Gloria Post" <Gloria.Post@dep.state.nj.us

>

03/20/2009 12:58 PM

To Barbara Abbott/RTP/USEPA/US@EPA, Joyce Donohue/DC/USEPA/US@EPA. Elizabeth Doyle/DC/USEPA/US@EPA, Suzanne Fenton/RTP/USEPA/US@EPA, Elaine Francis/DC/USEPA/US@EPA, Hend Galal-Gorchev/DC/USEPA/US@EPA, Erin Hines/RTP/USEPA/US@EPA, Christopher Lau/RTP/USEPA/US@EPA, Andrew Lindstrom/RTP/USEPA/US@EPA, Mark Maddaloni/R2/USEPA/US@EPA. Edward Ohanian/DC/USEPA/US@EPA, Connie Roberts/R4/USEPA/US@EPA, Rita Schoeny/DC/USEPA/US@EPA, Jennifer Seed/DC/USEPA/US@EPA, Mark Strynar/RTP/USEPA/US@EPA, Chris Weis/NEIC/USEPA/US@EPA, Doug Wolf/RTP/USEPA/US@EPA, Meghan LaReau/R2/USEPA/US@EPA, Laurence

Libelo/DC/USEPA/US@EPA,

<michelle\_phillips@hc-sc.gc.ca>, <mmarty@oehha.ca.gov>,

<Helen.Goeden@state.mn.us>

cc cc oehha.ca.gov>

Subject SOT PFOA in NJ Drinking Water Poster

My poster on PFOA in NJ Drinking Water: Occurrence, Exposure Significance, and Health-based Guidance is attached.

Thank you for your interest, and feel free to contact me if you have any questions.

Gloria

Gloria B. Post, Ph.D., DABT Research Scientist Division of Science, Research & Technology New Jersey Department of Environmental Protection PO Box 409 Trenton, NJ 08625

Telephone: (609) 292-8497

Fax: (609) 292-7340



Charles Bevington/DC/USEPA/US

03/16/2010 01:26 PM

To Kay Austin

cc Andrea Pfahles-Hutchens, Andrew Lindstrom, Bradley Grams, Bryan Lobar, Carolyn Acheson, Cathy Fehrenbacher, Chris Weis, Dave Guinnup, Dennis Utterback, Doug Wolf, Edward Ohanian, Elaine Francis, Elizabeth Doyle, Gail Mitchell, Glenn Adams, Gordon Evans, Jack Jones, Janine Dinan, Jennifer Seed, Jocelyn Keehner, Joe Williams, John Washington, Joyce Donohue, Katherine Sleasman, Laurence Libelo, Lee Thomas, Linda Sheldon, Marc Mills, Mark Maddaloni, Mark Strynar, Meghan LaReau, Phil Flax, Rick Stevens, Roger Reinhart, Ross Highsmith, Zhishi Guo

bcc

Subject Re: ROOM CHANGE. To 4225 EPA EAST Re: Rescheduled PFC Exposure Research Strategy Meeting, Tuesday March 16, EPA East 5227



Exposure Workshop Afternoon Discussion Straw Point.doc

**Charles Bevington OPPT-EAD** 202-564-8814

> Attemtion -- the con line in 5227 has be... 03/15/2010 08:03:20 PM Kay Austin

From: Kav Austin/DC/USEPA/US

Ross Highsmith/RTP/USEPA/US@EPA, Andrea Pfahles-Hutchens/DC/USEPA/US@EPA, Bradley To:

Grams/R5/USEPA/US@EPA, Bryan Lobar/DC/USEPA/US@EPA, Cathy

Fehrenbacher/DC/USEPA/US@EPA, Charles Bevington/DC/USEPA/US@EPA, Chris

Weis/NEIC/USEPA/US@EPA, Dave Guinnup/RTP/USEPA/US@EPA, Dennis Utterback/DC/USEPA/US@EPA, Doug Wolf/RTP/USEPA/US@EPA, Edward Ohanian/DC/USEPA/US@EPA, Elaine Francis/DC/USEPA/US@EPA, Elizabeth

Dovle/DC/USEPA/US@EPA. Gail Mitchell/R4/USEPA/US@EPA. Glenn Adams/R4/USEPA/US@EPA, Gordon Evans/CI/USEPA/US@EPA, Jack Jones/ATH/USEPA/US@EPA, Janine Dinan/DC/USEPA/US@EPA, Jennifer Seed/DC/USEPA/US@EPA, Jocelyn Keehner/DC/USEPA/US@EPA, John

Washington/ATH/USEPA/US@EPA, Joyce Donohue/DC/USEPA/US@EPA, Laurence

Libelo/DC/USEPA/US@EPA, Lee Thomas/R4/USEPA/US@EPA, Linda

Sheldon/RTP/USEPA/US@EPA, Andrew Lindstrom/RTP/USEPA/US@EPA, Mark Maddaloni/R2/USEPA/US@EPA, Mark Strynar/RTP/USEPA/US@EPA, Meghan

LaReau/R2/USEPA/US@EPA, Phil Flax/R2/USEPA/US@EPA, Rick Stevens/DC/USEPA/US@EPA, Roger Reinhart/R3/USEPA/US@EPA

Carolyn Acheson/CI/USEPA/US@EPA, Joe Williams/ADA/USEPA/US@EPA, Katherine Cc:

Sleasman/DC/USEPA/US@EPA, Marc Mills/CI/USEPA/US@EPA, Zhishi

Guo/RTP/USEPA/US@EPA

Date: 03/15/2010 08:03 PM

ROOM CHANGE. To 4225 EPA EAST Re: Rescheduled PFC Exposure Research Strategy Subject:

Meeting, Tuesday March 16, EPA East 5227

Attention -- the con line in 5227 has been determined late adfternoon to be non functional. We have arranged to move the workshop to 4225 EPA EAST.

Sorry for the late notice. See you tomorrow.

Kay

H. Kay Austin, PhD
Environmental Scientist
Associate Director
Economics, Exposure and Technology Division
U.S. EPA
Office of Pollution Prevention and Toxics
(202) 564-2695 office
(202) 230-7711 cell
(202) 564-8892 fax
(202) 564-8770 IO Main

This message sent from my Blackberry device

#### Ross Highsmith

---- Original Message ---From: Ross Highsmith

**Sent:** 03/14/2010 10:34 AM EDT

To: Andrea Pfahles-Hutchens; Bradley Grams; Bryan Lobar; Cathy Fehrenbacher; Charles Bevington; Chris Weis; Dave Guinnup; Dennis Utterback; Doug Wolf; Edward Ohanian; Elaine Francis; Elizabeth Doyle; Gail Mitchell; Glenn Adams; Gordon Evans; Jack Jones; Janine Dinan; Jennifer Seed; Jocelyn Keehner; John Washington; Joyce Donohue; Kay Austin; Laurence Libelo; Lee Thomas; Linda Sheldon; Andrew Lindstrom; Mark Maddaloni; Mark Strynar; Meghan LaReau; Phil Flax; Rick Stevens; Roger Reinhart; Roy Fortmann; Tina Duke; Toni Krasnic

Cc: Carolyn Acheson; Joe Williams; Katherine Sleasman; Marc Mills; Zhishi
Guo

**Subject:** Rescheduled PFC Exposure Research Strategy Meeting, Tuesday March 16, EPA East 5227

Attached is the draft OW presentation.

Thanks Ed.

Ross and Kay

[attachment "OW Issues & Needs\_PFCs Exposure Research\_Index\_03032010.doc" deleted by Kay Austin/DC/USEPA/US]

Christopher Lau/RTP/USEPA/US

01/07/2010 09:19 AM

To Andrew Lindstrom, Barbara Abbott, Cathy Fehrenbacher, Christopher Lau, Doug Wolf, Elaine Francis, Jennifer Seed, John Rogers, Joyce Donohue, Kerry Hamilton, Marc Mills, Ronald Hunter, Ross Highsmith, Laurence Libelo bcc

Subject reminder

Please don't forget our scheduled conference call at 10:30. The call-in number is 919-541-1591. Local RTP folks can meet at RTF 2407, if preferred.



PFAA Days III plan 1-7.doc

Chris

Christopher Lau/RTP/USEPA/US

03/31/2010 02:51 PM

To james.kelly

cc Laurence Libelo, Kerry.Dearfield

bcc

Subject invitation to PFAA Days III



Chris

Christopher Lau/RTP/USEPA/US

02/23/2010 06:41 PM

To Jennifer Seed, jlbutenhoff, Laurence Libelo, Andrea Pfahles-Hutchens, gwolsen, Chris Corton, CliffElcombe

cc bcc

Subject Fw: action needed ASAP

Dear All:

Please see Andy's note.

I hope you have a chance to go over the tentative agenda for PFAA Days III and the speaker suggestions.





PFAA Days III plan 2-21.doc Background 2-22.doc

Please feel free to suggest additions and/or changes. We need to finalize the roster pretty soon and I hope you all can follow Andy's suggestion and feel out the availability of the potential speakers. As soon as you get positive responses, please let me know and I will send out an official invitation with all the detailed information. You can use Andy's mocked letter as template if you wish, but make sure to convey to the speakers of their charges (to cover the state-of-science in addition to stuffs from their labs).

Please let me know if you have questions and/or problems with this chore. I am hoping to set up the

website next week and therefore will need to finalize the agenda as much as possible.

Thanks for your help.

#### Chris

---- Forwarded by Christopher Lau/RTP/USEPA/US on 02/23/2010 06:23 PM -----

From: Christopher Lau/RTP/USEPA/US

To: Andrew Lindstrom/RTP/USEPA/US@EPA

Date: 02/23/2010 03:34 PM Subject: Re: action needed ASAP

#### Andy:

Good idea and it reads well. 2 points of note:

- 1. Pay attention to the time allotment, not every speaker gets equal time.
- 2. I need to have the speaker agreements to populate the website, so the worm has to come before the fish.

Has Derek responded yet? He usually takes a bit of time for email exchange, suggest to call.

Thanks.

## Chris

Andrew Lindstrom Chris, Maybe we should write an exa... 02/23/2010 02:52:28 PM

From: Andrew Lindstrom/RTP/USEPA/US
To: Christopher Lau/RTP/USEPA/US

Date: 02/23/2010 02:52 PM Subject: Re: action needed ASAP

## Chris,

Maybe we should write an example invitation letter that covers all of the necessary information in an appropriate way (date, time, expenses, etc.). Each of the other session chairs could then add to the form letter to meet their specific needs once we deal with the essentials.

What to you think of this?

On behalf of the PFAA Days III organizing committee, I cordially invite you to make a platform presentation about perfluoroalkyl acids (PFAAs) and related compounds at the U.S. Environmental Protection Agency's PFAA Days III conference to be held in Research Triangle Park, North Carolina on June 8 – 10, 2010. This informal EPA conference is open to all scientists from federal and state agencies, the chemical industry, and academia. A main focus of the PFAA Days III meeting is to promote interactions among participants that will lend to future research collaboration. Toward that end, only a few platform presentations are planned, primarily to summarize the state-of-the-science for the topic of interest. If you are able to accept this invitation, we will pay for all costs associated with participation in the conference, to include airfare, hotels, and per diem food expenses.

Dr. Derek Muir from Environment Canada and I will chair the first session entitled "PFAAs in the Environment" and we ask that you make a 45 minute presentation that summarizes the most recent

advances in research concerning the PFAAs in the environment. In order to provide the most accurate description of the latest developments in this field, we ask that your presentation include work from your own laboratory as well as research from other leading labs that have made significant contributions in this area. The goal is to accurately describe the state-of-the-science with an eye toward what is likely to become important in the near future.

A complete description of the PFAA Days III conference can be found at our web site at:

We hope that you will be able to accept this invitation so we can all come to a better understanding of this important environmental issue.

If you have any questions about this invitation or the conference, please contact me at your earliest convenience.

Thank you very much,

Andy

Andrew B. Lindstrom, Ph.D.

Exposure Measurements and Analysis Branch Human Exposure and Atmospheric Sciences Division National Exposure Research Laboratory U.S. Environmental Protection Agency

Mail Drop E205-04 Research Triangle Park, NC 27711

Tel: 919-541-0551 Fax 919-541-3527 email: lindstrom.andrew@epa.gov

Christopher Lau

Dear Members of the Organizing Com...

02/22/2010 04:15:17 PM

Christopher Lau/RTP/USEPA/US 03/31/2010 03:11 PM To John Washington

cc Kerry.Dearfield, Laurence Libelo

bcc

Subject invitation to PFAA Days III



Chris

Christopher Lau/RTP/USEPA/US

To Kerry.Dearfield

cc Laurence Libelo

bcc

Subject invitation to PFAA Days III



Chris

Christopher Lau/RTP/USEPA/US

03/31/2010 03:12 PM

To Mark Strynar

cc Laurence Libelo, Kerry.Dearfield

bcc

Subject invitation to PFAA Days III



Chris

Christopher Lau/RTP/USEPA/US

03/31/2010 02:36 PM

To timothy.begley

cc kerry.dearfield, Laurence Libelo

bcc

Subject invitation to PFAA Days III



Chris

Christopher Lau/RTP/USEPA/US

03/31/2010 02:49 PM

To Zhishi Guo

cc Laurence Libelo, Kerry.Dearfield

bcc

Subject invitation to PFAA Days III



Chris

## Connie Roberts/R4/USEPA/US

04/21/2010 08:55 AM

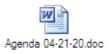
To Archie Lee, Bonnie Sawyer, Brian Gross, Dan Olone, David Apanian, Davina Marraccini, Dawn Harris-Young, Dee Stewart, Donnette Sturdivant, Doug Mundrick, Egide Louis, Frank Ney, Gail Mitchell, Glenn Adams, Gracy Danois, Laurence Libelo, Lee Thomas, Michael Hom, Mike Neill, Rebecca Fauver, Sean Ireland, Solomon Pollard, Stallings Howell, Suzanne Rubini, Van Shrieves, William Bush, WilliamT Jones

СС

bcc

Subject Invitation: Decatur / Dalton PFC Workgroup (Apr 21 10:00

AM EDT in 15C)



#### Connie Roberts/R4/USEPA/US

To Joyce Donohue, kerry.dearfield

01/04/2010 01:54 PM

cc Edward Ohanian, Gail Mitchell, Laurence Libelo

bcc

Subject Reply: Article Attached [Re: Fw: New paper on liver enzymes

and PFOA in general population]

Joyce: Thank You!

Kerry: This should be the liver tox article that you requested.

**Thanks** 

Connie L. Roberts
Special Assistant to the Director
Water Protection Division
US Environmental Protection Agency - Region 4
Atlanta Federal Center
61 Forsyth Street
Atlanta, Georgia 30303
404-562-9406
404-562-9318 (FAX)
roberts.connie@epa.gov

CONFIDENTIAL PREDECISIONAL / DELIBERATIVE PROCESS: Do not release this under FOIA. This message is intended exclusively for the individual(s) or entity(ies) to which it is addressed. This communication may contain information that is proprietary, privileged, or confidential or otherwise legally exempt from disclosure.

Joyce Donohue I received a copy from Gloria Post. Jo... 01/04/2010 01:42:29 PM

From: Joyce Donohue/DC/USEPA/US
To: Connie Roberts/R4/USEPA/US@EPA

Date: 01/04/2010 01:42 PM

Subject: Fw: New paper on liver enzymes and PFOA in general population

I received a copy from Gloria Post.

Joyce M. Donohue, Ph.D.
Office of Water, Office of Science and Technology
Health and Ecological Criteria Division
U.S. Environmental Protection Agency
Mail Code 4304T
1200 Pennsylvania Avenue NW
Washington DC 20460

Telephone: 202-566-1098 FAX: 202-566-1140

http://epa.gov/waterscience/

----- Forwarded by Joyce Donohue/DC/USEPA/US on 01/04/2010 01:41 PM -----

From: "Gloria Post" < Gloria.Post@dep.state.nj.us>

To: Joyce Donohue/DC/USEPA/US@EPA, Christopher Lau/RTP/USEPA/US@EPA

Date: 12/30/2009 12:15 PM

Subject: New paper on liver enzymes and PFOA in general population

FYI.

Happy New Year!

Gloria

Gloria B. Post, Ph.D., DABT Research Scientist Office of Science New Jersey Department of Environmental Protection PO Box 409 Trenton, NJ 08625

Telephone: (609) 292-8497

Fax: (609) 292-7340



Lin et al\_AssocPFCs&LiverEnzymes\_NHANES\_AmJGastro\_AdvAcc09.pdf

David Lynch/DC/USEPA/US To Carolyn Acheson

03/30/2010 11:16 AM

cc bcc

Subject Fw: SEP \$8.8 Million Total Cost on Wildlife Work Plan Biodegradation Testing

Hey Carolyn,

Here's what Wildlife International is proposing.

Needless to say it's well outside our budget so we will need to reduce the scope down to probably 2 - 4 pilots and 2 - 3 full SCAS studies, depending on how much we can cut costs elsewhere.

Talk to you soon.

David G. Lynch Economics, Exposure and Technology Division Office of Pollution Prevention and Toxics US Environmental Protection Agency 1200 Pennsylvania Ave NW (7406M) Washington, DC 20460

VOICE 202-564-8532 FAX 202-564-8892



Biodegradation SEP Work Plan.pdf

David Lynch/DC/USEPA/US

To Carolyn Acheson

06/01/2010 01:36 PM

cc

bcc

Subject Fw: Shipping addresses for MPI and Wildlife - SEP Product

Hi Carolyn,

We talked about this a while back and then I got sidetracked and didn't follow up with you.

Sorry

Can we talk to figure out how to get this done?

There's chain of custody info in the SEP attachment D below.

Thanks

David G. Lynch
Economics, Exposure and Technology Division
Office of Pollution Prevention and Toxics
US Environmental Protection Agency
1200 Pennsylvania Ave NW (7406M)
Washington, DC 20460

VOICE 202-564-8532 FAX 202-564-8892



FINAL SEP Attachment D 11-23-05.pdf

From: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

To: David Lynch/DC/USEPA/US@EPA

Cc: Mark Garvey/DC/USEPA/US@EPA, Robert J Tucker <Robert.J.Tucker@USA.dupont.com>

Date: 05/11/2010 09:17 AM

Subject: Re: Shipping addresses for MPI and Wildlife

#### David:

To be clear, we need the lab synthesized (high purity raws) variant of Group C3. The labs have the sparged (purified) variant of C3. Hope this is clear. Thanks.

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager
DuPont Chemicals and Fluoroproducts
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
Fax 302-992-4094

Lynch.David@epama il.epa.gov

05/10/2010 05:03 PM Robert J Tucker/AE/DuPont@DuPont

CC

То

Garvey.Mark@epamail.epa.gov

Subject

Re: Shipping addresses for MPI and

Wildlife

Got it Bob, thanks. I'll let you know when the shipment is ready.

David G. Lynch Economics, Exposure and Technology Division Office of Pollution Prevention and Toxics US Environmental Protection Agency 1200 Pennsylvania Ave NW (7406M) Washington, DC 20460

VOICE 202-564-8532 FAX 202-564-8892

>   From:	
Robert J Tucker <robert.j.tucker@usa.dupont.com></robert.j.tucker@usa.dupont.com>	
>   To:	
David Lynch/DC/USEPA/US@EPA	
>   Cc:	
Mark Garvey/DC/USEPA/US@EPA, Robert J Tucker <robert.j.tucker@usa.dupont.com></robert.j.tucker@usa.dupont.com>	
>   Date:	
05/10/2010 03:58 PM	
>   Subject:    >	

Shipping addresses for MPI and Wildlife		
>		Shipping addresses for MPI and Wildlife
	>-	

#### David:

Please find the attached shipping addresses for MPI and Wildlife. Please send 160 g of Group C3 to each laboratory. Could you please let me know when the samples have shipped so that I may put the labs on notice to look

for them? Thanks.

Attention: Robert Zhu MPI Research, Inc. 3058 Research Drive State College, PA 16801

Attention: Susan Porch Sample Custodian Wildlife International Ltd. 8598 Commerce Drive Easton, MD 21601

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager
DuPont Chemicals and Fluoroproducts
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
Fax 302-992-4094

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Francais Deutsch Italiano Espanol Portugues Japanese Chinese Korean

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Francais Deutsch Italiano Espanol Portugues Japanese Chinese Korean

http://www.DuPont.com/corp/email\_disclaimer.html

David Lynch/DC/USEPA/US

To Cathy Fehrenbacher, Laurence Libelo, Greg Fritz

12/08/2009 05:37 PM

CC

bcc

Subject The price of SEP characterization work just came down

## See below

David G. Lynch
Economics, Exposure and Technology Division
Office of Pollution Prevention and Toxics
US Environmental Protection Agency
1200 Pennsylvania Ave NW (7406M)
Washington, DC 20460

VOICE 202-564-8532 FAX 202-564-8892

---- Forwarded by David Lynch/DC/USEPA/US on 12/08/2009 05:35 PM -----

From: Robert J Tucker <Robert.J.Tucker@USA.dupont.com>

To: Mark Garvey/DC/USEPA/US@EPA

Cc: Andrea V Malinowski <Andrea.V.Malinowski@USA.dupont.com>, David

Lynch/DC/USEPA/US@EPA, Robert J Tucker <Robert.J.Tucker@USA.dupont.com>

Date: 12/08/2009 04:33 PM

Subject: Re: Can we schedule a conference call with MPI?

Mark:

This is the latest estimate from MPI. Please confirm your receipt of it. Thanks.

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager - DCSE Technology
DuPont Chemical Solutions Enterprise
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
Fax 302-992-4094

Robert J Tucker/AE/DuPont

12/08/2009 11:53 AM Garvey.Mark@epa.gov

CC

То

Lynch.David@epamail.epa.gov, Andrea V Malinowski/AE/DuPont@DuPont, Robert J Tucker/AE/DuPont@DuPont Subject Can we schedule a conference call with MPI?

#### Mark:

During my review of the most recent MPI proposal, I noted some differences in what we requested MPI to quote on, so I asked them to revise the quote. I attached the revised estimate for characterizing the two variants, with 9 substances in each variant, using the EPA suggested extraction procedure. It replaces the estimates I sent to you and David on 12/1/09.

(See attached file: 09-106398 SEP\_Characterization\_rev2.doc)

MPI has some questions they would like to discuss with EPA and DuPont before finalizing the proposed contract for EPA review and approval. I wanted to check with you on availability for a call with them. Please suggest some dates/times and I will check with them on availability. We'll need EPA technical folks on the phone for the discussion. Thanks.

Regards, Bob

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http://www.DuPont.com/corp/email\_disclaimer.html



09-106398 SEP\_Characterization\_rev2.doc

David Lynch/DC/USEPA/US

06/18/2010 02:22 PM

cc bcc

To Jackson Ellington

Subject Fw: Adaptation of EPA Athens Methods

Hi Jackson.

This is what Wildlife International worked up to describe what they are going to do to address their analytical problems.

I saw John got a copy of this e-mail but you didn't so here it is.

## Thanks

David G. Lynch
Economics, Exposure and Technology Division
Office of Pollution Prevention and Toxics
US Environmental Protection Agency
1200 Pennsylvania Ave NW (7406M)
Washington, DC 20460

VOICE 202-564-8532 FAX 202-564-8892

----- Forwarded by David Lynch/DC/USEPA/US on 06/18/2010 02:18 PM -----

From: "Ed Schaefer" < ESCHAEFE@WILDLIFEINTERNATIONAL.COM>

To: "William R Berti" < William.R.Berti@USA.dupont.com>, "Barbara S Larsen"

<Barbara.S.Larsen@USA.dupont.com>, Cathy Fehrenbacher/DC/USEPA/US@EPA, Greg

Fritz/DC/USEPA/US@EPA, Mark Garvey/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, David Lynch/DC/USEPA/US@EPA, "Robert C Buck"

<Robert.C.Buck@USA.dupont.com>, "Robert J Tucker" <Robert.J.Tucker@USA.dupont.com>,

John Washington/ATH/USEPA/US@EPA

Cc: "David Weiss" <dweiss@WILDLIFEINTERNATIONAL.COM>, "Ray VanHoven"

<RVANHOVE@WILDLIFEINTERNATIONAL.COM>, "Will Nixon"

<WNIXON@WILDLIFEINTERNATIONAL.COM>

Date: 06/18/2010 01:24 PM

Subject: Adaptation of EPA Athens Methods

#### Dear All,

The attached method procedure summary describes the work that will be conducted as a result of our discussions over the past few days. We are currently scheduled to start this work on 21 June 2010 and would greatly appreciate receiving any comments as soon as possible. Once again, we would like to thank everyone involved for their input and participation in these helpful discussions.

With kind regards, Ed Schaefer Wildlife International



Summary June 2010 GCextrall.pdf

David Lynch/DC/USEPA/US

03/02/2010 05:25 PM

To Mark Garvey

cc Greg Fritz, Laurence Libelo

bcc

Subject DRAFT (Discussion needed?) Responses to Follow up

questions from the SEP conf call with DuPont and Wildlife

International

## Response on the specification of centrifuge tubes from John Washington:

On the tubes/caps, we used: 1) Tubes - Nalgene "Round Centrifuge Tube, PPCO" where PPCO stands for polypropylene copolymer. 10 per pack, 16 mL size. Catalogue number 3110-0160.; 2) Caps - Nalgene "Centrifuge Closure Tube PP" 20 per pack. 18 mm size. Catalogue number DS3111-0018.

These tubes handled MTBE without any problems for us. We did observe that it is critical to avoid soiling the top interior of the tube and exterior of the cap in any way. If you do soil the interface of tube and cap at all, you run the risk of leakage, either by liquid flow when the tube is inverted during extraction or by evaporative loss of the volatile MTBE. Avoid this pitfall and our hundreds or thousands of before/after-extraction weighings indicate satisfactory tube-MTBE compatibility.

## Analyte Masses for GC/MS Analysis

Jackson Ellington provided the masses for the analytes specified in the Biodegradation SEP Exhibit A: Scope of Work - Appendix C Table 3 in the file attached and a copy of his analytical paper.





Table 2 Edited March 2010.doc FTOH Method JCHROMA.pdf

## Oasis HLP Polishing Cartridges

6 g, 35 cc Oasis HLB polishing cartridges (Waters stock number 186000118) are acceptable for use as specified in the EPA SOP PMB-54.1

David Lynch/DC/USEPA/US

To Mark Garvey, Greg Fritz, Laurence Libelo

04/12/2010 02:51 PM

cc Cathy Fehrenbacher

bcc

Subject Fw: SEP Costs from Wildlife

Please take a look at this so we can discuss a path forward on Wed.

I'll set up a meeting.

Thanks

David G. Lynch Economics, Exposure and Technology Division Office of Pollution Prevention and Toxics US Environmental Protection Agency 1200 Pennsylvania Ave NW (7406M) Washington, DC 20460

VOICE 202-564-8532 FAX 202-564-8892

----- Forwarded by David Lynch/DC/USEPA/US on 04/12/2010 02:48 PM -----

From: "Ed Schaefer" < ESCHAEFE@WILDLIFEINTERNATIONAL.COM>

To: David Lynch/DC/USEPA/US@EPA

Cc: "Robert J. Tucker \(E-mail\)" < Robert.J.Tucker@USA.dupont.com>, "William R. Berti Ph.D

\(E-mail\)" < William.R.Berti@USA.dupont.com>

Date: 04/08/2010 03:54 PM

Subject: SEP Costs

#### David,

Thanks for taking time today to discuss the Biodegradation SEP. I have attached a very basic summary of how changes to the experimental design and various assumptions impact the cost for a SCAS pilot study. Also included is a breakdown of the number of analytical samples generated from a SCAS unit per sampling interval. Hopefully this information will assist in the design of studies that meet the program goals and data quality objectives within the restraints of the SEP. Please let me know if you have any questions or comments.

Regards, Ed Schaefer Wildlife International <<Costing Detail.xls>>



David Lynch/DC/USEPA/US

To Mark Garvey

04/14/2010 01:48 PM

CC

bcc

Subject New Spreadsheet for SEP Budget Discussions



David G. Lynch Economics, Exposure and Technology Division Office of Pollution Prevention and Toxics US Environmental Protection Agency 1200 Pennsylvania Ave NW (7406M) Washington, DC 20460

VOICE 202-564-8532 FAX 202-564-8892

David Lynch/DC/USEPA/US

То

04/20/2010 11:04 AM

cc bcc

Subject SEP Conf call with DP to discuss budget

# Meeting

Date 04/21/2010

Time 02:00:00 PM to 03:00:00 PM

Chair David Lynch

Invitees

Required Greg Fritz; Laurence Libelo

Optional

FYI Mark Garvey

Location 5102E



Wildlife 2010.xls

This meeting was rescheduled and I can't make it. Can you guys attend? Talk with Mark and Bob Tucker (DP) regarding cost reductions to do more biodeg testing. Issues including reduction in the number of substances characterized, reduction in cost of analytical equipment leasing, cost per substance characterized are open for discussion and hopefully Bob will have some of those numbers.

David Phillips/R4/USEPA/US

03/25/2010 03:32 PM

To Laurence Libelo cc Sean Ireland

bcc

Subject Re: ICT in Cartersville, GA

#### Laurence,

See below, from the City's pretreatment coordinator. Attached are two files which comprise the current pretreatment permit. I've offered the City regional assistance if they believe test interference is truly the cause of the O&G issue.

# David R. Phillips

Clean Water Enforcement Branch U.S. EPA Region 4

404-562-9773 (Tel) 404-562-9729 (Fax)

- Environmental Engineer
- Senior Commissioned Enforcement Officer
- Industrial Pretreatment Program Manager

-----Forwarded by David Phillips/R4/USEPA/US on 03/25/2010 03:11PM -----

From: Lisa Tilley ledwards@cityofcartersville.org

(See attached file: Innovative Chemical Tech Coverletter 6-09-6-12.doc)

(See attached file: ICT PERMITS EXP 2012.doc)

They were in SNC for Oil and Grease. ICT says that they think the surfactants they use interfere with the Oil and Grease test. They insist that there is no Oil and Grease [and] that the surfactant is causing levels to appear elevated. We have had several meetings to discuss this issue. ICT is a batch discharger [and] they usually discharge two batches per month at approximately 18,000 gallons each. ICT is located at 103 Walnut Grove Road [and] the Water Pollution Control Plant is located at 102 Walnut Grove Road [so] they are practically discharging into our influent.



Innovative Chemical Tech Coverletter 6-09-6-12.doc

ICT PERMITS EXP 2012.doc

Deborah Sherer/DC/USEPA/US

05/11/2010 01:35 PM

To Laurence Libelo

cc bcc

Subject PCP Report



Final\_Report\_PCP\_July\_15.pdf

Deborah Sherer Environmental Engineer Exposure Assessment Branch Phone: 202-564-8529 Fax: 202-564-8892

Diane Leblond/RTP/USEPA/US

03/24/2010 04:07 PM

To Laurence Libelo

СС

bcc

Subject Requested Article/Document Attached: "Modeling the hydrolysis of perfluorinated compounds..."

The article/document you requested is attached. Please reply if you have any questions or problems with the file.



modeling the hydrolysis of perfluorinated compounds.pdf

Note: The attached material may be protected by US Copyright (Title 17 US Code).

Diane Leblond, MLS Interlibrary Loan & Serials Assistant US EPA Library | UNC Contract Staff 109 Alexander Drive | C267-01 Research Triangle Park, NC 27711

p: 919.541.2777 | f: 919.541.1405 leblond.diane@epa.gov

#### Gail Mitchell/R4/USEPA/US

03/01/2010 10:00 AM

To Connie Roberts, Lee Thomas, Michael Hom, Sean Ireland, Dan Olone, Glenn Adams, William Bush, Stacey Haire, Laurence Libelo, Mike Neill, Archie Lee, Frank Ney, Dee Stewart, Rebecca Fauver, Bonnie Sawyer, WilliamT Jones, Brian Gross, Gracy Danois, Donnette Sturdivant, Laura Niles, Davina Marraccini, Dawn Harris-Young

СС

bcc

Subject FYI - PFAA Days in Raleigh at RTP in June

Here's the June workshop I was telling you about at our last workgroup meeting. Looks pretty interesting.

Gail Mitchell, Deputy Director Water Protection Division USEPA Region 4 (Atlanta, GA) 404/562-9234 404/562-9318 (fax)

---- Forwarded by Gail Mitchell/R4/USEPA/US on 03/01/2010 09:58 AM -----

From: Laurence Libelo/DC/USEPA/US
To: Gail Mitchell/R4/USEPA/US@EPA

Date: 02/22/2010 09:48 PM Subject: Fw: action needed ASAP Gail,

Chris Lau has sent the latest draft of the PFAA days program for comments. Can you please take a look at it and let us know if you have suggestions/comments?

Also, I would like to propose that you co-chair and lead the discussion during the Wednesday afternoon 5:30 focus group session on Govt. issues. This is the session we talked about where states and regional offices get time to talk about what they are doing and their ongoing needs. I think you have a much better understanding of the issues that folks outside of Washington are dealing with that any of us. Andy, Toni and I will help but I think it would be better to have you and someone from Environment or Health Canada or another region or state as the session leaders. Someone from Minnesota or the Great Lakes program might be good. Or someone from Region 3? What do you think?

Laurence

#### Laurence

----Forwarded by Laurence Libelo/DC/USEPA/US on 02/22/2010 09:40PM -----

To: Andrew Lindstrom/RTP/USEPA/US@EPA, Barbara Abbott/RTP/USEPA/US@EPA, Carolyn Acheson/CI/USEPA/US@EPA, Cathy Fehrenbacher/DC/USEPA/US@EPA, Christopher Lau/RTP/USEPA/US@EPA, Doug Wolf/RTP/USEPA/US@EPA, Elaine Francis/DC/USEPA/US@EPA, Jennifer Seed/DC/USEPA/US@EPA, John Rogers/RTP/USEPA/US@EPA, Joyce Donohue/DC/USEPA/US@EPA, Kerry Hamilton/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Marc Mills/CI/USEPA/US@EPA, Ronald Hunter/DC/USEPA/US@EPA, Ross Highsmith/RTP/USEPA/US@EPA

From: Christopher Lau/RTP/USEPA/US

Date: 02/22/2010 04:15PM Subject: action needed ASAP

Dear Members of the Organizing Committee:

Attached please find drafts of PFAA Days III background and agenda, and the cover design for the symposium provided by the NHEERL graphics team.

(See attached file: Background 2-22.doc) (See attached file: PFAA Days III plan 2-21.doc) (See attached file: PFAA 2010 identity graphic.jpg)

Please make comments and changes as you see fit and return your suggestions to me in the next couple of days. I need to work with the NHEERL communication team to develop a PFAA Days III website for registration, and we need to post the background and agenda. I am hoping to have the website go live next week. so that we can advertize the meeting at SOT.

So far, I have all the session leaders committed to the meeting (except Kerry Dearfield whom I haven't contacted yet). I need to work with each of them to finalize the roster of speakers and to invite them formally (especially those outside of EPA).

Please pay attention to the two focus groups that I have taken the liberty of organizing. If approved, they can be held on separate days (as drafted) or concurrently on June 9. Let me know how you feel about the options.

<b>-</b> .		
Ιľ	าลท	KS.

Chris







Background 2-22.doc PFAA Days III plan 2-21.doc PFAA 2010 identity graphic.jpg

#### Gail Mitchell/R4/USEPA/US

03/17/2010 02:58 PM

- To Dan Olone, Stallings Howell, Connie Roberts, Lee Thomas, Michael Hom, Sean Ireland, Dan Olone, Glenn Adams, William Bush, Stacey Haire, Laurence Libelo, Mike Neill, Archie Lee, Frank Ney, Dee Stewart, Rebecca Fauver, Bonnie Sawyer, WilliamT Jones, Brian Gross, Gracy Danois, Donnette Sturdivant, Laura Niles, Davina Marraccini, Dawn Harris-Young
- cc Connie Roberts, Lee Thomas, Michael Hom, Sean Ireland, Dan Olone, Glenn Adams, William Bush, Stacey Haire, Laurence Libelo, Mike Neill, Archie Lee, Frank Ney, Dee Stewart, Rebecca Fauver, Bonnie Sawyer, WilliamT Jones, Brian Gross, Gracy Danois, Donnette Sturdivant, Laura Niles, Davina Marraccini, Dawn Harris-Young

bcc

Subject Fw: Cincinnati Water works Ohio river intake Perfluorochemical data

Dan/Stallings - Heads up. May need to talk to water systems on the Ohio River about monitoring for PFCs??

Gail Mitchell, Deputy Director Water Protection Division USEPA Region 4 (Atlanta, GA) 404/562-9234 404/562-9318 (fax)

----- Forwarded by Gail Mitchell/R4/USEPA/US on 03/17/2010 02:57 PM -----

From: Laurence Libelo/DC/USEPA/US
To: Gail Mitchell/R4/USEPA/US@EPA

Date: 03/17/2010 02:53 PM

Subject: Fw: Cincinnati Water works Ohio river intake Perfluorochemical data

# Gail,

FYI - The Ohio River Valley Sanitary Commission is about to release a report of PFCs in the Ohio River. They will report finding elevated PFCs - up to several ppb PFOS and others PFCs at spots on the river with most places having low (0.10-0.30 levels).

Several places in KY seem to be big sources with levels > 1ppb PFOS.

I have not seen the draft report yet but others including industry and utilities have. ORSANCO told me they hope to have it out by the end of the month.

We have gotten some data from the Cincinnati Water Works that shows elevated PFOA in the Ohio river. In their initial analysis of the raw river water in 2005 they found 0.10 ppb. Over the last few years they have seen a decrease but the river still has > 0.01 ppb PFOA.

In DuPont monitoring they found elevated PFOA > 1 ppb close to the Parkersburg plant and 0.2 ppb 18 miles downstream.

Other then these I don't know of any PFC data on the Ohio river.

The good news is that Cincinnati has a really good GAC system that appears to be removing the PFOA well.

The bad news is that most of the water systems in OH, WV and KY don't have good GAC. And that the shorter chain stuff is not efficiently removed by GAC

----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/08/2010 06:29 PM -----

From: "Metz, Debbie" < Debbie. Metz@gcww.cincinnati-oh.gov>

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 03/08/2010 05:01 PM Subject: RE: Perfluorochemical data

Attached is our table. Sorry for the delay. Reconstructing the GAC run days took a little while.

----Original Message----

From: Libelo.Laurence@epamail.epa.gov [mailto:Libelo.Laurence@epamail.epa.gov] Sent: Tuesday, March 02, 2010 1:39 PM

To: Metz, Debbie

Subject: RE: Perfluorochemical data



Gail Mitchell/R4/USEPA/US

To Laurence Libelo

03/10/2010 12:56 PM

cc bcc

Subject Re: Fw: Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and WWTPs Results

I see no problem giving these to the state person. We would release these to anyone that asked through FOIA.

Gail Mitchell, Deputy Director Water Protection Division USEPA Region 4 (Atlanta, GA) 404/562-9234 404/562-9318 (fax)

Laurence Libelo Gail, Is this information public?

03/10/2010 11:23:23 AM

From: Laurence Libelo/DC/USEPA/US

To: Gail Mitchell/R4/USEPA/US@EPA

Date: 03/10/2010 11:23 AM

Subject: Fw: Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and

**WWTPs Results** 

## Gail,

# Is this information public?

Can I send it to a person in the Minn. Dept. of Health? He his going to give a talk at PFAA days on PFCs in wastewater and wants to know what is going on in Decatur and Dalton. He has been looking at the web site and asked if he could see the data.

If it is OK I would like to send him info on Decatur also.

Thanks.

#### Laurence

---- Forwarded by Laurence Libelo/DC/USEPA/US on 03/10/2010 11:20 AM -----

From: Michael Hom/R4/USEPA/US

To: Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Lee

Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca Fauver/R4/USEPA/US@EPA, WilliamT Jones/R4/USEPA/US@EPA, William Bush/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Stacey Haire/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Frank

Ney/R4/USEPA/US@EPA

Date: 03/04/2010 03:47 PM

Subject: Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and

WWTPs Results

## FYI. Latest results.



Dalton 308 Response Feb 24 2010 Monthly Progress Report and LAS and Wildlife Data.PDF



Dalton 308 Response Feb 24 2010 Attachment B 2 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment B 1 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment F WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment E WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment D Wild Turkey Serum.PDF



Dalton 308 Response Feb 24 2010 Attachment C Wild Turkey Muscle and Liver.PDF



Jed Costanza/DC/USEPA/US

To David Lynch, Laurence Libelo, Bob Boethling

02/17/2010 09:33 AM

cc bcc

Subject Fw: DfE Workgroup Meeting - agenda w/ attachments

Check it out...an AFFF replacement.

---- Forwarded by Jed Costanza/DC/USEPA/US on 02/17/2010 09:32 AM -----

From: Melanie Vrabel/DC/USEPA/US

To: Jed Costanza/DC/USEPA/US@EPA, Kristan Markey/DC/USEPA/US@EPA, Rebecca

Jones/DC/USEPA/US@EPA, Larry Newsome/DC/USEPA/US@EPA, David

Lynch/DC/USEPA/US@EPA, David DiFiore/DC/USEPA/US, Emma Lavoie/DC/USEPA/US@EPA,

Elizabeth Sommer/DC/USEPA/US@EPA, Mary Cushmac/DC/USEPA/US@EPA

Date: 02/16/2010 03:04 PM

Subject: Re: DfE Workgroup Meeting - agenda w/ attachments

# 4. ChemGuard

68037-05-8 polymer 57018-52-7 107-41-5





Chemguard report.pdf Chemguard%20Ltd%20%20Background%20Paper%20for%20DfE%20011210%20TLM[1].doc





Chemguard%20Evolutionary%20Chart%20120409%20TLM[1].doc Chemguard supporting data.pdf

David DiFiore

Hi, All. We hope to catch up some follo...

02/10/2010 02:24:54 PM

# **DfE Workgroup Meeting**

Wed 02/17/2010 10:00 AM - 11:30

AM

Attendance is for Melanie Vrabel

Chair: David DiFiore/DC/USEPA/US

Location: DfE Conference

Christa McDermott/DC/USEPA/US@EPA, Elizabeth Sommer/DC/USEPA/US@EPA, Emma

Lavoie/DC/USEPA/US@EPA, Jed Costanza/DC/USEPA/US@EPA, Kelly Grant/DC/USEPA/US@EPA, Kristan Markey/DC/USEPA/US@EPA, Larry

Newsome/DC/USEPA/US@EPA, Imorlacci@syrres.com, Mary Cushmac/DC/USEPA/US@EPA,

Melanie Vrabel/DC/USEPA/US@EPA, Rebecca Jones/DC/USEPA/US@EPA

Optional: Chuantung Lin/DC/USEPA/US@EPA, David Lynch/DC/USEPA/US@EPA, Fred

Arnold/DC/USEPA/US@EPA, Loraine Passe/DC/USEPA/US@EPA

# Description

Required:

Hi, All.

We hope to catch up some following the Snowzillas.

If we can't get a quorum on the 17th (because of the short week, etc.), we'll defer any important product decisions until the 24th.

Thanks for all your support!

David

# **Personal Notes**

Jed Costanza/DC/USEPA/US

02/18/2010 01:57 PM

To Laurence Libelo, David Lynch

CC

bcc

Subject PFCAs in Pro-Ski Waxers

## **ES&T ASAP**

From April or May and throughout the unexposed period there was stabilization in PFOA concentrations for all technicians, regardless of initial concentration. It seems like the PFOA levels have **reached a steady state for technicians** 3, 4, 6, 7, and 8, who had initial levels exceeding 100 ng/mL, since their perfluorocarboxylate concentrations do not increase over time despite experiencing exposure to the same waxes and fumes as the technicians who increase by 10-fold. It still remains to be elucidated whether a **reservoir in the human body accumulates excess amounts** of perfluorocarboxylates after a threshold level in the blood is reached and how specific interactions or exchange between the organs occur.

We show that **PFOA**, PFNA, PFDA, PFHpA, and PFUnDA have **high bioaccumulation** potential and that there is a risk for increasing human body burdens of these perfluorinated carboxylatesuponcontinued lifestyle exposures as well as occupational exposures.



PFCAs in Ski Technicians.pdf

Jed Costanza, PhD USEPA Office of Pollution Prevention and Toxics Exposure Assessment Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460 202-564-8524

> John Washington/ATH/USEPA/US 03/29/2010 11:17 AM

To Sean Ireland, Michael Hom, Lee Thomas

cc Laurence Libelo

bcc

Subject Fw: PFC data for Decatur, from ADEM

Guys,

Laurence sent me the attached spreadsheet that he received from your Region 4 offices. In it are two data points for [PFOA] for samples of Decatur sludge collected in 2008:

Sample Location	C4 Acid	C5 Acid	C6 Acid	C7 Ac
Decatur WWTP Sludge(results in ng/g) dry weight ADEM Sample 12/29/2008	2.81 (4.12)	10.8 (18.2)	ND (ND)	1.88 (

The row title indicates the samples and data are from ADEM.

I would like to include these two data points in a manuscript I am preparing for publication (with appropriate attribution of course). Would any of you be able to inform me who I can contact to seek permission to publish these two data points?

Thanks very much for any guidance, John

John Washington

United States Environmental Protection Agency National Exposure Research Laboratory Ecosystems Research Division 960 College Station Road

Athens, GA 30606 phone: (706) 355-8227 fax: (706) 355-8202

email: washington.john@epa.gov http://www.epa.gov/athens/

---- Forwarded by John Washington/ATH/USEPA/US on 03/29/2010 11:09 AM -----

From: Laurence Libelo/DC/USEPA/US

To: John Washington/ATH/USEPA/US@EPA

Date: 03/24/2010 03:53 PM

Subject: Fw: PFC data for Decatur, from ADEM

Misc. sampling data

---- Forwarded by Laurence Libelo/DC/USEPA/US on 03/24/2010 03:53 PM -----

From: Sean Ireland/R4/USEPA/US

To: Michael Hom/R4/USEPA/US@EPA, Lee Thomas/R4/USEPA/US@EPA, Laurence

Libelo/DC/USEPA/US@EPA

Date: 12/15/2009 05:38 PM

Subject: PFC data for Decatur, from ADEM



PFCs comparison.xls

Kannan Kurunthachalam <kkannan@wadsworth.org>

03/22/2010 12:15 PM

To Laurence Libelo

СС

bcc

Subject Re: Fw: Morgan County Landfill Leachate SID Permit Parameters

#### Hi Laurence:

We can measure C15-C18 and we have done that for wastewater samples. In fact, our wastewater paper published in 2006 has some analytical method info for these long chain PFCAs. We have been measuring 8:2 FTCAs in water and some FTOHs in air. We have not analyzed 9:2 FTOHs and 11:2 FTOHs and if we can get the standards we will be able to measure them.

I am leaving for Brazil tomorrow for a thesis defense. I am a committee member for the thesis. I will be back Monday next week and look forward to hearing from you.

```
Thanks
Kannan
At 10:50 AM 3/22/2010 -0400, Libelo.Laurence@epamail.epa.gov wrote:
>Hi Kannan
>I have been asked to help the Alabama DEP and a landfill Decatur with
>PFC analytical questions.
>Alabama has issued a discharge permit with some PFCs monitoring
>requirements. Most of the PFCs can by run by MPI or Test America.
>there are few that the commercial labs can't analyze. This is the
>direction the state is apparently going and there will be more permits
>with these in them. For now they have a requirement to run then but
>nobody has commercial methods up and running.
>Can you do them? If so I will let the state know and they will probably
>contract with you to do the analysis. If not do you know of anyone who
>might be able to?
>If you have any idea on how they can get these analyzed it would be very
>helpful.
>Thanks
>Laurence
>
>Can you analyze
> 9:2 s Florotelomer Alcohol and 11:2 s Florotelomer and the c15-c18
> (See attached file: DOC022510.pdf)
===========
>E. Laurence Libelo, Ph.D.
>Senior Environmental Engineer
>Exposure Assessment Branch
```

>Office of Pollution Prevention and Toxics >U.S. Environmental Protection Agency >OPPTS/OPPT/EETD/EAB >202-564-8553 >FAX 202-546-8671

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## pfoswastewater.pdf

Chief, Laboratory of Organic Analytical Chemistry Wadsworth Center, NY State Dept of Health

&

Professor, Dept of Environmental Health Sciences, SUNY at Albany Director, Environmental Chemistry Track, Dept Env Health Sci

http://www.wadsworth.org/resnres/bios/kannan.htm

Empire State Plaza, PO Box 509 Albany, NY 12201-0509, USA

Tel: 518-474-0015; Fax: 518-473-2895

\_\_\_\_\_\_

-----

Katie Smythe <a href="mailto:ksmythe@mindspring.com">ksmythe@mindspring.com</a>>

03/18/2010 04:47 PM

Please respond to Katie Smythe <ksmythe@regnet.com> To Jim Willis, Cathy Fehrenbacher, David Lynch, Laurence Libelo

CC

bcc

Subject TRP Docket Submission: Comments on Washington et al.

The Telomer Research Program (TRP) has submitted comments on the paper by Washington et al., "Degradability of an Acrylate-Linked, Fluorotelomer Polymer in Soil," for posting to the EPA Docket #EPA-HQ-OPPT-2003-0012. These comments supplement the published comments of Russell et al. (ES&T, 2010) and focus on the following areas: analyte recovery, the Kd supporting the exhaustive soil extractions, limitations of the data used for kinetic model analyses, the concept of fluorophilicity, and degradation pathways. Please see the attached comments.

Best regards, Katie Smythe TRP Administrator



# 2010-March-15 TRP Comments for USEPA Docket Submission.pdf

## Laurence Libelo/DC/USEPA/US

05/25/2010 11:33 AM

To Amal Mahfouz, baugh.thomasl, Bradley Grams, Cathy Fehrenbacher, colt.christina, Connie Roberts, Dana Tulis, Dave Crawford, Dennis Utterback, Diane Sheridan, Edward Ohanian, Eileen Sheehan, Elaine Francis, Elizabeth Doyle, Elizabeth Southerland, Gail Mitchell, Glenn Adams, Janine Dinan, Jennifer Seed, Joyce Donohue, KarenD Johnson, Katherine Sleasman, Laurence Libelo, Marcia Bailey, Mardi Klevs, Marna McDermott, Meghan LaReau, Ross Highsmith, Toni Krasnic

СС

bcc

Subject Ohio River data from ORSANCO

Folks,

The ORSANCO report with information on PFCs and other stuff in the Ohio River is out today.

POF

ORCANCO Ohio River report.pdf

Table 4 Concentrations of perfluoroalkyl compounds (PFCs), pharmaceuticals and personal care products (PPCPs), and hormones/sterols in the Ohio River and its tributaries.

Sample number	PFBA	PFPeA	PFHKA	PFHpA	PFOA	PFNA	PFDA	PFUnA	PFDoA	PFBS	PFHxS	PFOS
· · · ·	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
1	1.14	1.08	< MRL	< MRL	2.04	< MRL	< MRL	< MRL	< MRL	2.51	< MRL	2.24
2	< MRL	1.34	1.85	1.11	3.87	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.79
3	1.53	1.84	2.35	1.57	3.41	< MRL	< MRL	< MRL	< MRL	2.31	< MRL	2.63
4	1.09	1.17	1.31	1.24	2.50	1.04	< MRL					
5	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL					
6	1.49	1.76	1.56	1.45	3.01	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.82
7	2.44	3.63	3.95	2.01	5.39	1.37	1.16	< MRL	< MRL	< MRL	< MRL	4.42
8	2.13	2.00	2.49	2.63	35.2	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.88
9	< MRL	< MRL	< MRL	< MRL	1.48	< MRL	< MRL	< MRL	< MRL	18.4	< MRL	< MRL
10	1.37	1.16	1.56	1.66	19.1	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.71
11	3.89	3.30	4.69	2.85	6.22	1.74	1.01	< MRL	< MRL	< MRL	< MRL	5.14
12	2.21	1.32	2.55	1.35	14.1	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	3.15
13	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL					
14	1.01	1.56	1.71	1.58	13.1	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.58
15	1.46	1.53	2.35	1.62	14.4	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	4.97
16	5.29	13.7	7.83	4.4	14.3	1.64	< MRL	< MRL	< MRL	4.61	2.98	7.36
17	1.83	1.94	2.42	1.37	9.21	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	5.58
18	1.97	3.07	2.78	2.11	9.44	0.993 S	< MRL	5.80				
19	2.69	2.09	2.95	1.59	11.5	1.22 S	1.65	3.02	4.75	< MRL	< MRL	7.27
20	5.75	8.59	10.4	4.30	18.2	6.17 S	8.04	< MRL	< MRL	111	< MRL	669
21	1.40	1.81	2.30	1.32	3.43	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	3.90
22	1.52	2.26	1.97	1.17	8.93	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	6.49
23	12.5	4.65	9.48	7.67	23.9	< MRL	< MRL	< MRL	< MRL	16.5	5.62	35.4
24	15.7	6.68	14.7	9.14	31.2	8.08 S	2.95	< MRL	< MRL	31.8	8.91	29.2
25	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL					
	7											
26 (FS)	15.2	13.5	13.7	14.2	11.6	12.2	10.1	7.96	3.12	13.0	9.67	4.19
26 (SL)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
27 (FS)	215	196	199	211	174	178	181	113	42.6	177	149	79.1
27 (SL)	200	200	200	200	200	200	200	200	200	200	200	200
MRI	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00

FS - Field Spike (result)

# **Table 1**: Sample numbers and general location information.

## Sample Number Location River River Mile\* Date

- 1 Tributary Allegheny 9.5 9/14/2009
- 2 Tributary Monongahela 5.0 9/14/2009
- 3 Ohio River Mainstem (EI) Ohio 3.1 9/14/2009
- 4 Ohio River Mainstem Ohio 9.7 9/14/2009
- 5 Ohio River Mainstem (FB) Ohio 462.9 9/16/2009
- 6 Ohio River Mainstem Ohio 86.7 9/14/2009
- 7 Ohio River Mainstem (EI) Ohio 91.3 9/14/2009
- 8 Ohio River Mainstem Ohio 220.3 9/15/2009
- 9 Tributary Kanawha 4.1 9/15/2009
- 10 Ohio River Mainstem Ohio 306.8 9/15/2009
- 11 Tributary Scioto 105.8 10/20/2009
- 12 Ohio River Mainstem Ohio 394.9 9/15/2009
- 13 Ohio River Mainstem (FB) Ohio 220.3 9/15/2009
- 14 Ohio River Mainstem Ohio 462.9 9/16/2009
- 15 Ohio River Mainstem (EI) Ohio 478.0 9/16/2009
- 16 Tributary Mill Creek 0.2 9/16/2009
- 17 Ohio River Mainstem Ohio 600.5 9/21/2009
- 18 Ohio River Mainstem (EI) Ohio 612.2 9/21/2009

SL - Spiked Level (expected)

19 Ohio River Mainstem Ohio 791.5 9/21/2009

20 Ohio River Mainstem (EI) Ohio 791.8 9/21/2009

21 Tributary Wabash 0.8 9/21/2009

22 Ohio River Mainstem Ohio 889.1 9/21/2009

23 Ohio River Mainstem Ohio 934.4 9/22/2009

24 Ohio River Mainstem (EI) Ohio 935.9 9/22/2009

25 Tributary (FB) Scioto 105.8 10/20/2009

26 PFC Field Spike 1 (Low) Scioto 105.8 10/20/2009

27 PFC Field Spike 2 (High) Scioto 105.8 10/20/2009

\*  $\hfill \square$  Tributary river miles are assigned by the number of miles upstream of the confluence

with the Ohio River proper.

EI □ Effluent influenced

FB ☐ Field blank taken at this location

**ORSANCO Page 10 of 279** 

Laurence Libelo/DC/USEPA/US 06/10/2010 08:47 AM To Andrew Lindstrom

CC

bcc

Subject Fw: Revised response to NERL on PFCs Exposure Research

Planning Workshop materials

-----Forwarded by Laurence Libelo/DC/USEPA/US on 06/10/2010 08:46AM -----

To: Laurence Libelo/DC/USEPA/US@EPA From: Cathy Fehrenbacher/DC/USEPA/US

Date: 06/09/2010 03:13PM

cc: Kav Austin/DC/USEPA/US@EPA

Subject: Fw: Revised response to NERL on PFCs Exposure Research Planning Workshop materials

Andy, If you have a chance could you print this ppt out for me?

Thanks.



Laurence

OPPT's PFC Exposure Research Needs 03102010.ppt

Laurence Libelo/DC/USEPA/US To Andrew Lindstrom

CC

bcc

Subject Fw: don't know if you have seen this

02/25/2010 11:16 AM

### ----- Forwarded by Laurence Libelo/DC/USEPA/US on 02/25/2010 11:16 AM -----

From: Jennifer Seed/DC/USEPA/US

To: Cathy Fehrenbacher/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA

Date: 02/23/2010 03:53 PM

Subject: don't know if you have seen this



Laurence Libelo/DC/USEPA/US To Andrew Lindstrom

04/05/2010 02:10 PM

cc bcc

0/2010 02.10 FW

Subject Fw: PFC in Ohio River

----- Forwarded by Laurence Libelo/DC/USEPA/US on 04/05/2010 02:10 PM -----

From: Shoji Nakayama/CI/USEPA/US
To: Laurence Libelo/DC/USEPA/US

Date: 02/17/2010 03:54 PM Subject: PFC in Ohio River

### Laurence.

Just for your info. Please don't cite and distribute until the ORSANCO publishes this data. Racine, OH is ~30 mi downstream of the Washington Works.

Thanks,

Shoji



PFC\_Ohio.pdf

Shoji F. Nakayama, MD, PhD Phone: (513) 569-7490 Fax: (513) 569-7620

U.S. Environmental Protection Agency National Risk Management Research Laboratory 26 West Martin Luther King Drive, MS 190 Cincinnati, OH 45268

\_\_\_\_\_

Laurence Libelo/DC/USEPA/US To Andrew Lindstrom

СС

01/27/2010 02:12 PM

bcc

Subject Fw: Requested Article/Document Attached: Am J

Gastroenterol; advance online publication 15 Dec 2009 pfoa

liver



investigation of the associations between low-dose....pdf

Laurence Libelo/DC/USEPA/US

04/26/2010 05:10 PM

To Andrew Lindstrom

cc Mark Strynar

bcc

Subject Re: ES&T focus issue

Here are my suggestions but I like Andy's better.



pfaa days comments.doc

Andrew Lindstrom How about something like this? Thanks 04/26/2010 04:18:57 PM

From: Andrew Lindstrom/RTP/USEPA/US
To: Mark Strynar/RTP/USEPA/US@EPA
Cc: Laurence Libelo/DC/USEPA/US@EPA

Date: 04/26/2010 04:18 PM

Subject: Re: ES&T focus issue

How about something like this?

Thanks,

Andy

## est@uiowa.edu

To:

Dr. Jerald Schnoor, Editor in Chief, Environmental Science & Technology

From:

Mark J. Strynar (USEPA/ORD)

Andrew B. Lindstrom (USEPA/ORD)

Laurence E. Libelo (USEPA/ OCSPP)

### Subject:

Proposal for a Perfluoroalkyl Acid (PFAA) Focus Issue in *Environmental Science & Technology* – From the U.S. EPA's PFAA Days III June 8 - 10, 2010

### **Summary:**

The USEPA is holding the PFAA Days III conference from June 8-10 in Research Triangle Park, NC where the world's leaders in perfluorinated compound research will present their latest findings to a group of academic, industry, and governmental officials working in this field in an effort to summarize the current state of the science and to anticipate where new developments are likely to lead in the near future. We propose that the platform presentations, breakout discussion sessions, and posters from this meeting serve as the basis for 20 -25 publications that could constitute a PFAA Focus Issue for ES&T.

### **Background:**

In the summer of 2006, a "PFAA Days" workshop was held at the US EPA campus in Research Triangle Park, NC, where scientists and managers from the Agency's Program and Regional Offices met to identify research needs for health risk assessment. Tow years later this inaugural meeting was followed by the "PFAA Days II" symposium held in June 2008, which was open to the public and attracted about 200 participants from EPA, academia, industry, and other governmental entities. A summary of that meeting is attached here:

[attachment "PFAA Days II 2008 Summary.pdf" deleted by Laurence Libelo/DC/USEPA/US]

A special issue devoted to capturing the major developments summarized during this symposium was subsequently published in *Reproductive Toxicology* (vol. 27, issues 3-4, 2009). This volume includes 19 full papers that deal mainly with the toxicology of the PFAAs. This special issue also contains a total of 70 online PDF files associated with presentation/posters presented at the workshop. According to Dr. Chris Lau, who served as the guest editor of this issue, the journal now indicates that this issue is among the highest rated ever in terms of website hits and downloaded manuscripts. A comparable undertaking is planned again in *Reproductive Toxicology* for the toxicology sections of the upcoming PFAA Days III meeting on June 8 - 10, 2010.

### **PFAA Days III**

Since the 2008 symposium, significant research progress has been made by the EPA and other scientists in this field, with new findings being reported in the literature at an accelerating pace. It is therefore appropriate to hold the next conference in this series where the very latest findings and potential future trends can be discussed in depth. The PFAA Days III symposium will be held on June 8-10, 2010, again on the US EPA campus in Research Triangle Park, NC. This is intended to be an informal EPA conference that is open to all scientists from other federal and state agencies, chemical industry and academia. The official conference website summarizes this year's meeting completely: <a href="http://www.epa.gov/nheerl/pfaa days 3/">http://www.epa.gov/nheerl/pfaa days 3/</a>

A main focus of this year's meeting is to promote interactions among participants that will lend

to future research collaboration. The conference will focus on the following topics: PFAAs in the environment, PFAA exposure, PFAA epidemiology, PFAA toxicities, nuclear receptor involvement in PFAA actions. Additionally, focus groups will be discussing PFAA analytical chemistry and PFAA issues among government agencies.

The organizing committee is expecting increased participation in this year's conference with greater representation from international attendees. We expect more that 200 participants from academia, industry, and government organizations, with representatives from Canada, China, Japan, Norway, Sweden, Switzerland, and the United Kingdom already registered for the meeting. The list of speakers and moderators includes an international group of the most productive and well published researchers on the topic of PFAAs. Presently, the PFAA Days III Symposium Speakers and Moderators include the following:

Barbara Abbott (US EPA)

Tim Begley (FDA)

John Butenhoff (3M)

Antonia Calafat (CDC)

Chris Corton (US EPA)

Harvey Clewell (Hamner Institute)

Kerry Dearfield (USDA)

Jaime DeWitt (East Carolina University)

David Ehresman (3M)

Cliff Elcombe (CXR Biosciences)

Elaine Francis (US EPA)

Tony Fletcher (London School of Hygiene and Tropical Medicine)

Bruno Hagenbuch (University of Kansas)

Heidi Hubbard (US EPA)

Mary Kaiser (DuPont)

James Kelly (Minnesota Department of Health)

Tony Krasnic (US EPA)

Chris Lau (US EPA)

Robert Letcher (Environment Canada)

Laurence Libelo (US EPA)

Andy Lindstrom (US EPA)

Matthew Longnecker (NIEHS)

Scott Mabury (University of Toronto)

Gail Mitchell (US EPA)

Derek Muir (Environment Canada)

Shoji Nakayama (US EPA)

John Newsted (Michigan Sate University)

Geary Olsen (3M)

Andrea Pfahles-Hutchens (US EPA)

Mitch Rosen (US EPA)

P. Barry Ryan (Emory University)

Jennifer Seed (US EPA)

Kyle Steenland (Emory University)

Cheryl Stein (Mount Sinai School of Medicine) Mark Strynar (US EPA) Morel Symons (DuPont) Shuhei Tanaka (Kyoto University) John Washington (US EPA) Graham White (Health Canada)

In addition, all attendees are encouraged to make poster presentations that highlight the findings from their individual laboratories, allowing everyone to share their current interests.

### **Desired Outcome**

While the publication of the materials from the PFAA Days II meeting in Reproductive Toxicology has been viewed as a great success, it is evident that a great deal of this material goes beyond the true scope of that journal. In fact, we estimate that approximately 75% of the material that will be presented at this year's meeting is actually much better suited for ES&T. We expect that approximately 20-25 full papers could come from material related to PFAA days III, in addition to the Feature and Guest Comments articles. Because ES&T is clearly the journal of record for the latest developments in the PFAA field, we expect that participants in this year's conference will be very eager to submit their most recent research findings for a special focus issue of your journal. In the last year there were 75 papers published in ES&T that included "perfluorinated" somewhere in the document, indicating PFAAs are an important and interesting topic to your general readership. An open call for other papers related to PFAAs could also be made to supplement this focus issue if a greater variety of publications is necessary or desired.

If you have any questions about the PFAA Days III conference or this proposal, please contact us as needed.

Thank you for your consideration,

Mark Strynar Andrew Lindstrom and Laurence Libelo

Mark Strynar

Andy and Laurence, Here are some tho...

04/23/2010 03:13:01 PM

Laurence Libelo/DC/USEPA/US 03/08/2010 06:30 PM

To Andrew Lindstrom, Shoji Nakayama, John Washington

CC

Subject Cincinnati Water works Ohio river intake Perfluorochemical data

FYI

From: "Metz, Debbie" < Debbie. Metz@gcww.cincinnati-oh.gov>

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 03/08/2010 05:01 PM Subject: RE: Perfluorochemical data

Attached is our table. Sorry for the delay. Reconstructing the GAC run days took a little while.

----Original Message----

From: Libelo.Laurence@epamail.epa.gov [mailto:Libelo.Laurence@epamail.epa.gov] Sent: Tuesday, March 02, 2010 1:39 PM

To: Metz, Debbie

Subject: RE: Perfluorochemical data

Great,

Thanks.

Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671

From: "Metz, Debbie" <Debbie.Metz@gcww.cincinnati-oh.gov>

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 03/02/2010 01:08 PM

Subject: RE: Perfluorochemical data

Sure, and we are digging up all the original laboratory reports and should have the data to you shortly.

----Original Message----

From: Libelo.Laurence@epamail.epa.gov [mailto:Libelo.Laurence@epamail.epa.gov] Sent: Tuesday, March 02, 2010 1:06 PM

To: Metz, Debbie

Subject: Perfluorochemical data

Debbie,

Would you be OK with our including a statement that we know of the data and not giving any details in our letter on the Proposed DuPont monitoring?

How does this sound:

"...The Agency is aware of additional data generated by the Cincinnati Water Works and the Ohio River Valley Sanitation Commission that show elevated PFOA levels a considerable distance downstream of the site..."

Thanks

Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671



Laurence Libelo/DC/USEPA/US

02/17/2010 12:03 PM

To Bradley Grams

CC

bcc

Subject Fw: PFCs in MILORGANITE

Bradley,

FYI

---- Forwarded by Laurence Libelo/DC/USEPA/US on 02/16/2010 01:33 PM -----

From: Laurence Libelo/DC/USEPA/US

To: Cathy Fehrenbacher/DC/USEPA/US@EPA

Cc: Toni Krasnic/DC/USEPA/US@EPA, Mark Strynar/RTP/USEPA/US@EPA, John

Washington/ATH/USEPA/US@EPA, Andrew Lindstrom/RTP/USEPA/US@EPA, Ross

Highsmith/RTP/USEPA/US@EPA, Rick Stevens/DC/USEPA/US@EPA, Jan Pickrel/DC/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Michael

Hom/R4/USEPA/US@EPA, Mark Garvey/DC/USEPA/US@EPA, Kay Austin/DC/USEPA/US@EPA

Date: 02/16/2010 01:25 PM Subject: PFCs in MILORGANITE

### Cathy,

Mike Hom in R4 forwarded on results of analysis from the Milwaukee WWTP commercial sludge product MILORGANITE. In addition to the usual mix of priority pollutants and new stuff like PBDEs they looked for PFCs. This is becoming more common as a results of Decatur and we can expect other biosolids to be analyzed across the country.

They found alot of PFCs including PFOS > 100 ppb and PFOA and shorter chain stuff at > 10 ppb. (see page 121). This is in line with what has been reported from other treated WWTP sludges, and is a pretty good example of what we should expect in any biosolids.

# Pen Fluorina Ted Chemicals EXECUTIVE SUMMARY - Detection Highlights Decorption The New est POP"

$\gamma \gamma \gamma$							
1,			REPORTING		ANALYTICAL		
•	PARAMETER	RESULT	LIMIT	UNITS	METHOD		
9013424/979 06/26/09 14:30 001							
301342	4/9/9 06/26/09 14:30 OUL						
	Perfluoroundecanoic acid (PFUn	5.B	5.4	ug/kg	DEN -LC-0012		
	Perfluorododecanoic acid (PFDo	13	5.4	ug/kg	DEN -LC-0012		
্ণ	Perfluoropentanoic acid (PFPA)	1.9	2.1	ug/kg	DEN -LC-0012		
~0,	Perfluorobexanoic acid (PFHxA)	23	2.1	ug/kg	DEN -LC-0012		
, V	Perfluoronomanoic acid (PFNA)	3.1	2.1	ug/kg ·	DEN -LC-0012		
The	Perfluorodecanoic acid (PFDA)	1.3	2.1	ug/kg	DEN -LC-0012		
, , , , ,	Perfluorodecane sulfonate (PFD	14	2.1	ug/kg	DEN -LC-0012		
4. h	Perfluorooctanesulfonate	100 -	2.1	ug/kg	DEN -LC-0012		
· (Λ.	Perfluorooctanoic Acid	22	5.4	ug/kg	DEN -LC-0012		
./	Percent Moisture	6.7	0.10	8	ASTM D 2216-90		
901367	8/979 01/03/09 002						
	Perfluoroundecanoic acid (PFUn	7.7	5.3	ug/kg	DEN -LC-0012		
			5.3	ug/kg ug/kg	DEN -LC-0012		
, Q X	Perfluoropentanoic acid (PFPA)		2.1	ug/kg	DEN -LC-0012		
Lough positi	Perfluoropentanoic acid (PFHXA)				DEN -LC-0012 DEN -LC-0012		
TO Per	Perfluoronexanoic acid (PPHKA)		2.1	ug/kg			
7 40	Perfluoroheptanoic acid (PFMpA		2.1	ug/kg	DEN -LC-0012		
. ov**Y	Perfluoronomanoic acid (PFNA)	5.3	2.1	ug/kg	DEN -LC-0012		
10.	-	16	2.1	ug/kg	DEN -LC-0012		
	Perfluorodecane sulfonate (PFD		2.1	ug/kg	DEN -LC-001,2		
	Perfluorocctanesulfonate	110 -	2.1	ug/kg	DEN -LC-0012		
	Perfluoroctanoic Acid	16 —	5.3	ug/kg	DEN -LC-0012		
	Percent Moisture	6.0	0.10	*	ASTM D 2216-90		
9013673/979 01/05/08 003							
301367	3/3/3 01/03/06 003						
	Perfluoroundecanoic acid (PFUn	5.0.	5.3	ug/kg	DEN '-LC-0012		
	Perfluorododecanoic acid (PFDo	6.5	5.3	ug/kg	DEN -LC-0012		
4	Perfluoropentanoic acid (PPPA)	11	2.1	ug/kg	DEN -LC-0012		
Loo' Posit	Perfluorohexanoic acid (PFHxA)	8.0	2.1	ug/kg	DEN -LC-0012		
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L" - 0311	Perfluorodecanoic acid (PFDA)	9.4	2.1	ug/kg	DEN -LC-0012		
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o V	Perfluoroctanoic Acid	9.3 -	5.3	ug/kg	DEN -LC-0012		

This stuff is widely sold and I think it represents a wide spread source of PFC contamination environmentally and to people who use it. The levels they report are below the OSWER direct contact limits but we probably should be concerned about this stuff being sold everywhere. This is a consumer

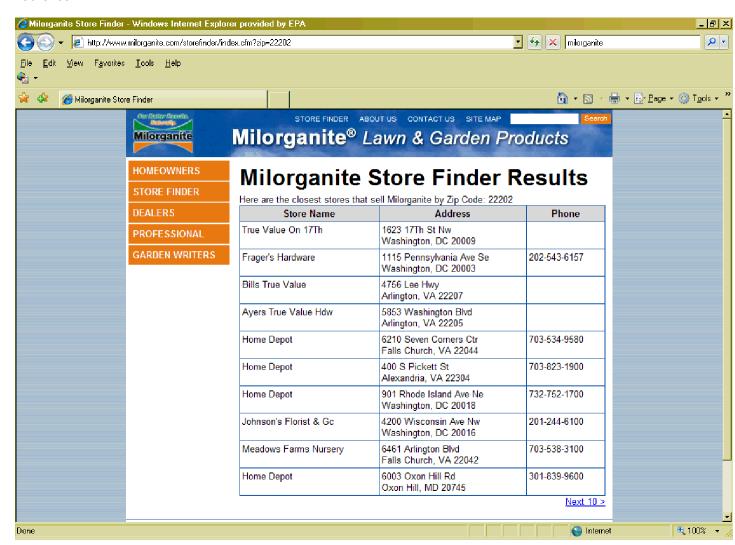
0.10

ASTM D 2216-90

Percent Moisture

product rather then a limited biosolids application so it is much more widespread then what we have been dealing with in Decatur or Dalton. Here, for example, are the local stores near my house where it is sold.

### Laurence



---- Forwarded by Laurence Libelo/DC/USEPA/US on 02/16/2010 01:02 PM -----

From: Michael Hom/R4/USEPA/US

To: Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Glenn

Adams/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Lee Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca

Fauver/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Ed Sims/R4/USEPA/US@EPA,

Rick Stevens/DC/USEPA/US@EPA, Robert Bastian/DC/USEPA/US@EPA, Mark

Meckes/CI/USEPA/US@EPA, Laura Boczek/CI/USEPA/US@EPA

Date: 02/10/2010 02:54 PM

Subject: Fw: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe

Acrobat Professional

### ----- Forwarded by Michael Hom/R4/USEPA/US on 02/10/2010 02:40 PM -----

From: "Smart, Daphne Y" <DDY@adem.state.al.us>

To: Michael Hom/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA

Cc: "Dean, Glenda" <GLD@adem.state.al.us>, "Ramsey, Samuel" <SRamsey@adem.state.al.us>

Date: 02/10/2010 02:33 PM

Subject: FW: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe

Acrobat Professional

ADEM received the attached biosolids report, which includes PFC testing results. We wanted to ensure that EPA was also aware of this report.

The letter was addressed to the previous Biosolids contact for the State of GA. Mike – as discussed by phone please forward to the new GA contact.

If you need additional information, please do not hesitate to contact me.

Thank you,

Daphne Y. Smart, Chief Municipal Permit Section Water Division

(334) 271-7801



Mission: Assure for all citizens of the state a safe, healthful and productive environment

From: Caldwell, Mattie

Sent: Thursday, February 04, 2010 2:06 PM

To: Smart, Daphne Y

Subject: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe Acrobat

Professional



XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf

Laurence Libelo/DC/USEPA/US

03/15/2010 02:14 PM

To Brian Englert

СС

bcc

Subject Fw: Weinberg memo

Here is the Weinberg memo. It was submitted to us by Rob Bilott, a lawyer from Taft Stettinius and Hollister who was the lead on the class action suit against Dupont in Ohio/West Virginia. I think it should be required reading for anyone working on PFCs. It has become required reading in a number of ethics classes and classes on environmental risk "management" at universities around the country.



The memo has an interesting story - It was given by Dupont to Bilott as part of a big document dump under discovery for the class action law suit. In 2006 Paul Thacker, a reported with the journal Environmental Science and Technology saw it in our AR-226 docket. He wrote an article in the Journal on how industry uses "science" and how this memo is an example of how they try to manipulate the process.



Thacker piece on Weinberg memo.pdf

This article annoyed board members at the American Chemical Society who publishes the journal and got Thacker fired. He is now an investigator in Senator Grassley's office. He is very interested in how money effects science and with his current job he is pretty powerful so he can actually do something about what he sees as unacceptable influence of money on the scientific process and on how regulatory agencies can be manipulated by industry funded "science".

http://www.nature.com/news/2009/090916/full/461330a.html

"....Thacker is the point person behind a far-reaching probe into the financial reports required from biomedical researchers who receive federal funds. The Grassley investigation "has changed the practice of medicine", says Steven Nissen, a cardiologist at the Cleveland Clinic in Ohio, which last December began requiring its physicians to publicly disclose industry payments of more than \$5,000 a year. "And Paul Thacker is the bulldog that's leading the charge."

Laurence

Laurence Libelo/DC/USEPA/US

03/15/2010 02:36 PM

To Brian Englert

CC

bcc

Subject PaPs papers



Laurence Libelo/DC/USEPA/US

03/23/2010 03:15 PM

To Brian Englert

cc John Washington

bcc

Subject Re: sulfonamido compounds

Brian,

3M has a report that describes the sources and uses of the different sulfoante chemistries. It is a little dated but it gives a good idea of what was used for what. Since they got ou tof the sulfre cheistries others have taken it up and we belive that hte uses are still prety much the same only now it is from China, India, Italy, etc.

Teh discharge listed in report are not too acurate but the product chemistry and use info is. The report is in the docket at

EPA-HQ-OPT-2002-0008

Also in the same docket is some info on the reaction pathways that result in the different sulfer compounds in the environment. I alo have a couple of powerpoints that 3M has given at meeting that show the pathways.

EPA-HQ-OPPT-2002-00

51

Here is a sulfur chem degradation chain that shows where the FOSSAs and others come from. We have ga bunch of studies that show the pathways for the monomers and a coupld on the polymers.

3M discharged a lot of these in Decatur, Cottage Grove, Cordova and other places. In the multicity study they reported finding alot of FOSA. See table 5 in the multicity report summary.



fosa deg chain 001.jpg



3M multicity study report.pdf

Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D., PG Senior Environmental Engineer Exposure Assessment Branch Office of Pollution Prevention and Toxics U.S. Environmental Protection Agency 1200 Pennsylvania Ave. NW., MC 7406 Washington, D.C. 20460 202) 564-8553

Brian Englert Laurence/John, I wanted to share our c... 03/23/2010 10:16:56 AM

From: Brian Englert/DC/USEPA/US

To: John Washington/ATH/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA

Date: 03/23/2010 10:16 AM Subject: Re: sulfonamido compounds

### Laurence/John.

I wanted to share our current compound list with you as you may have thoughts on the absence of certain analytes due to your ongoing work.

It is basically John W.'s list + a 1-2 compounds. We plan to make several changes to the methodology to accommodate the new compounds we plan to add (switching from SPE protocols) and different instrumentation our lab has (no UPLC in our contract lab).

Additionally, I think we will attempt to add at least some of the sulfonamido compounds I mention in my email below.

Let me know if you have any thoughts or concerns.

Perfluorobutanesulfonic acid		
Perfluoorobutanoic acid		
Perfluoropentanoic acid		
Perfluoro-n-hexanoic acid		
Perfluoro-n-heptanoic acid		
Perfluoro-n-octanoic acid		
Perfluoro-n-nonanoic acid		
Perfluoro-n-decanoic acid		
Perfluoro-n-undecanoic acid		
Perfluoro-n-dodecanoic acid		
Perfluoro-n-tridecanoic acid		
Perfluoro-n-tetradecanoic acid		
Perfluoro-n-hexane sulfonate		
Perfluoro-n-heptane sulfonate		

Perfluoro-n-octanesulfonate

Perfluorooctane sulphonamide

Brian Englert, Ph.D. Environmental Scientist U.S. EPA, Engineering & Analytical Support Branch Engineering and Analysis Division Office of Science and Technology, Office of Water 1200 Pennsylvania Avenue NW (4303T) Washington, D.C. 20460 Phone: 202-566-0754, FAX: 202-566-1053

http://www.epa.gov/waterscience

englert.brian@epa.gov

Mail, FedEx, UPS, etc: 1301Constitution Avenue Rm. 6231AA (Connecting Wing) Washington, DC 20004

**Brian Englert** 

Laurence, Again, thanks for the slides y...

03/16/2010 07:37:17 AM

Laurence Libelo/DC/USEPA/US

12/15/2009 06:27 PM

To Cathy Fehrenbacher

cc

bcc

Subject Fw: Re: Please read paragraph on fluoridation and PFCs

Cathy,

I forgot to cc you on this.

I think Gail has this under control.

----Forwarded by Laurence Libelo/DC/USEPA/US on 12/15/2009 06:25PM -----

To: Gail Mitchell/R4/USEPA/US@EPA From: Laurence Libelo/DC/USEPA/US

Date: 12/15/2009 01:04PM

cc: Joyce Donohue/DC/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA

Subject: Re: Please read paragraph on fluoridation and PFCs

oops.

Gail Mitchell---12/15/2009 12:52:00 PM---Did you mean to attach the document with your edits? Gail Mitchell, Deputy Director Water Protection

From: Gail Mitchell/R4/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA

Cc: Joyce Donohue/DC/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA

Date: 12/15/2009 12:52 PM

Subject: Re: Please read paragraph on fluoridation and PFCs

Did you mean to attach the document with your edits?

Gail Mitchell, Deputy Director Water Protection Division USEPA Region 4 (Atlanta, GA) 404/562-9234 404/562-9318 (fax)

Laurence Libelo---12/15/2009 12:41:54 PM---Gail, This looks good. I made a few very minor suggested edits.

From: Laurence Libelo/DC/USEPA/US

To: Gail Mitchell/R4/USEPA/US@EPA

Cc: Joyce Donohue/DC/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA

Date: 12/15/2009 12:41 PM

Subject: Re: Please read paragraph on fluoridation and PFCs

Gail,

This looks good. I made a few very minor suggested edits.

As part of the 11/2008 Decatur water sample analysis John Washington's lab checked for background PFC levels in the water in the lab in Athens. They did not detect any PFOS, POFA, PFBS or PFDA in the tap water. Other then that I don't know of any PFC analysis that has been done on water or leachate from Athens

Laurence

\_\_\_\_\_\_

\_\_\_\_\_

E. Laurence Libelo, Ph.D. Senior Environmental Engineer Exposure Assessment Branch Office of Pollution Prevention and Toxics U.S. Environmental Protection Agency OPPTS/OPPT/EETD/EAB 202-564-8553 FAX 202-546-8671

Gail Mitchell---12/15/2009 10:41:39 AM---Joyce/Laurence - See the paragraph I wrote, and see what you think. Last paragraph on 2nd page. Am

From: Gail Mitchell/R4/USEPA/US

To: Joyce Donohue/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA

Cc: Sean Ireland/R4/USEPA/US@EPA

Date: 12/15/2009 10:41 AM

Subject: Please read paragraph on fluoridation and PFCs

Joyce/Laurence - See the paragraph I wrote, and see what you think. Last paragraph on 2nd page. Am I being a little too definitive?

[attachment "McElheney 2nd Response 12 15 09.doc" deleted by Laurence Libelo/DC/USEPA/US]

Gail Mitchell, Deputy Director Water Protection Division USEPA Region 4 (Atlanta, GA) 404/562-9234 404/562-9318 (fax)

Joyce Donohue---12/15/2009 10:15:08 AM---I cannot speak for the chemistry but I think Lawrence's analysis is correct. I checked the geologic

From: Joyce Donohue/DC/USEPA/US

To: Gail Mitchell/R4/USEPA/US@EPA

Date: 12/15/2009 10:15 AM

Subject: Lawrence's analysis

I cannot speak for the chemistry but I think Lawrence's analysis is correct. I checked the geological map for Georgia and except for one small area they generally have low background fluoride levels but low for fluoride is about 0.1 or 0.2 mg/L

Joyce M. Donohue, Ph.D.
Office of Water, Office of Science and Technology
Health and Ecological Criteria Division
U.S. Environmental Protection Agency
Mail Code 4304T
1200 Pennsylvania Avenue NW
Washington DC 20460
Telephone: 202-566-1098

FAX: 202-566-1140

http://epa.gov/waterscience/



McElhenry response - Libelo comments.doc

Laurence Libelo/DC/USEPA/US

01/28/2010 01:17 PM

To Cathy Fehrenbacher

cc Marna McDermott, Toni Krasnic, Kay Austin, Jan Pickrel, Sean Ireland, Michael Hom, Gail Mitchell

bcc

Subject Fw: Decatur collection system sampling results

Cathy,

FYI.

R4 forwarded on a response from Robert Harris, Decatur Utilities' lawyer, to an ADEM request for information on their wastewater collection system sampling. He seems pretty annoyed with ADEM and with EPA. He says that the sampling was done to protect DU and that he should not have to give it to ADEM or EPA. He is turning it over but is telling them to not do anymore.

He is annoyed that EPA and ADEM did not do the sampling needed to determine where the PFCs were coming from and that we didn't deal with the problem as we should have. DU is trying to avoid getting sued and he seems to think that Govt. agencies are largely to blame for because we didn't do what we should have done to deal with PFCs. He wants Alabama to follow Minnesota's example and make the industry do massive cleanups of the soil, water, landfills etc.

As far as the data go a couple of interesting things jump out of the data at first read:

The highest PFOS is from Diakin effluent. They never used PFOS as far as I know. Diakin effluent also had the highest levels of EtFOSSA and MeFOSSA and a lot of FOSA. If they didn't use the PFOS precursors where are they coming from? I think it is probably from the on-site soils since Diakin is on the old 3M land application area.

Mr. Harris has a bit of a point in that if Alabama or EPA had required 3M and Diakin to clean up their sites then DU would not have to deal with the PFOS and precursors coming from these soils. The Diakin effluent and probably much of the PFOS and precursors in the collection system is probably from the old 3M land applications.

There is a lot of PFOS and PFOA in the samples from the residential areas (Stratford and Mallard Fox LS). This may be an indication of the contribution of consumer products as a source.

The PFOA from Torey is pretty high considering that they said they have stopped using the dirty PTFE dispersions. Either the dispersion still has a fairly high level of PFOA or there is a lot of residual in their

systems. If it is the dispersions this suggests that anyone who uses the new "cleaner" stuff will still have significant amounts of PFOA in their wastewaters.

If I have free time I will look over the data and see what else is in there. R4 is dealing with it so I don't think we need to do anything at this point.

### Laurence

---- Forwarded by Laurence Libelo/DC/USEPA/US on 01/28/2010 12:45 PM -----

From: Sean Ireland/R4/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA
Cc: Michael Hom/R4/USEPA/US@EPA

Date: 01/28/2010 12:17 PM

Subject: Decatur collection system sampling results

PDF

Read this first: ADEM request for results, 2010-01-20.PDF

PDF

And the response next: DU collection system results, 2010-01-27.pdf

Laurence Libelo/DC/USEPA/US

02/16/2010 01:25 PM

To Cathy Fehrenbacher

CC Toni Krasnic, Mark Strynar, John Washington, Andrew Lindstrom, Ross Highsmith, Rick Stevens, Jan Pickrel, Gail Mitchell, Michael Hom, Mark Garvey, Kay Austin

bcc

Subject PFCs in MILORGANITE

### Cathy,

Mike Hom in R4 forwarded on results of analysis from the Milwaukee WWTP commercial sludge product MILORGANITE. In addition to the usual mix of priority pollutants and new stuff like PBDEs they looked for PFCs. This is becoming more common as a results of Decatur and we can expect other biosolids to be analyzed across the country.

They found alot of PFCs including PFOS > 100 ppb and PFOA and shorter chain stuff at > 10 ppb. (see page 121). This is in line with what has been reported from other treated WWTP sludges, and is a pretty good example of what we should expect in any biosolids.

# Pen Fluorina Ted Chemicals EXECUTIVE SUMMARY - Detection Highlights Decorption The New est POP"

$\gamma \gamma \gamma$							
1,			REPORTING		ANALYTICAL		
•	PARAMETER	RESULT	LIMIT	UNITS	METHOD		
9013424/979 06/26/09 14:30 001							
301342	4/9/9 06/26/09 14:30 OUL						
	Perfluoroundecanoic acid (PFUn	5.B	5.4	ug/kg	DEN -LC-0012		
	Perfluorododecanoic acid (PFDo	13	5.4	ug/kg	DEN -LC-0012		
্ণ	Perfluoropentanoic acid (PFPA)	1.9	2.1	ug/kg	DEN -LC-0012		
~0,	Perfluorohexanoic acid (PFHxA)	23	2.1	ug/kg	DEN -LC-0012		
, V	Perfluoronomanoic acid (PFNA)	3.1	2.1	ug/kg ·	DEN -LC-0012		
The	Perfluorodecanoic acid (PFDA)	1.3	2.1	ug/kg	DEN -LC-0012		
, , , , ,	Perfluorodecane sulfonate (PFD	14	2.1	ug/kg	DEN -LC-0012		
* { h	Perfluorooctanesulfonate	100 -	2.1	ug/kg	DEN -LC-0012		
· (Λ.	Perfluorooctanoic Acid	22	5.4	ug/kg	DEN -LC-0012		
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o V	Perfluoroctanoic Acid	9.3 -	5.3	ug/kg	DEN -LC-0012		

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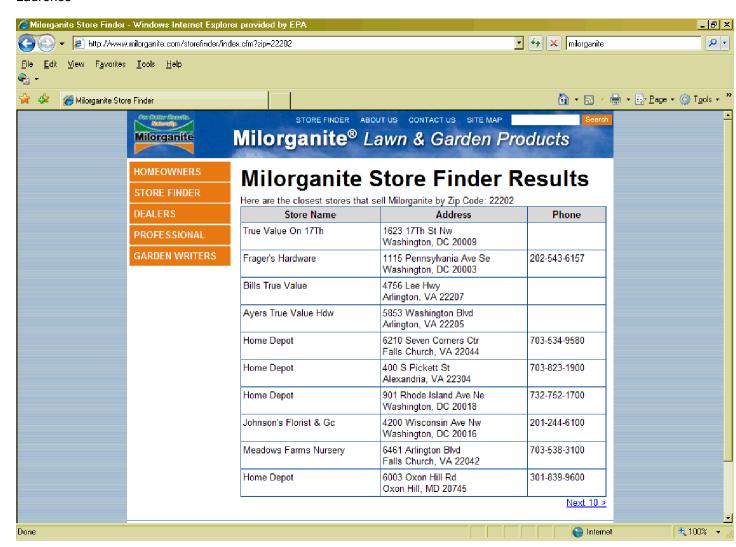
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ASTM D 2216-90

Percent Moisture

product rather then a limited biosolids application so it is much more widespread then what we have been dealing with in Decatur or Dalton. Here, for example, are the local stores near my house where it is sold.

### Laurence



---- Forwarded by Laurence Libelo/DC/USEPA/US on 02/16/2010 01:02 PM -----

From: Michael Hom/R4/USEPA/US

To: Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Glenn Adams/R4/USEPA/US@EPA. Laurence Libelo/DC/USEPA/US@EPA. Lee

Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca

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Rick Stevens/DC/USEPA/US@EPA, Robert Bastian/DC/USEPA/US@EPA, Mark

Meckes/CI/USEPA/US@EPA, Laura Boczek/CI/USEPA/US@EPA

Date: 02/10/2010 02:54 PM

Subject: Fw: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe

Acrobat Professional

### ----- Forwarded by Michael Hom/R4/USEPA/US on 02/10/2010 02:40 PM -----

From: "Smart, Daphne Y" <DDY@adem.state.al.us>

To: Michael Hom/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA

Cc: "Dean, Glenda" <GLD@adem.state.al.us>, "Ramsey, Samuel" <SRamsey@adem.state.al.us>

Date: 02/10/2010 02:33 PM

Subject: FW: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe

Acrobat Professional

ADEM received the attached biosolids report, which includes PFC testing results. We wanted to ensure that EPA was also aware of this report.

The letter was addressed to the previous Biosolids contact for the State of GA. Mike – as discussed by phone please forward to the new GA contact.

If you need additional information, please do not hesitate to contact me.

Thank you,

Daphne Y. Smart, Chief Municipal Permit Section Water Division

(334) 271-7801



Mission: Assure for all citizens of the state a safe, healthful and productive environment

From: Caldwell, Mattie

Sent: Thursday, February 04, 2010 2:06 PM

To: Smart, Daphne Y

Subject: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe Acrobat

Professional



XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf

Laurence Libelo/DC/USEPA/US

01/12/2010 01:04 PM

To Cathy Fehrenbacher

cc "Dearfield, Kerry", Toni Krasnic, Toni Krasnic, David Lynch, Mark Strynar, John Washington

bcc

Subject Fw: Dalton 308 Response Dec 23 2009 Progress Report, Deer Sample Results. Have copies of Dalton letters to private residence also Here are the deer meat and liver results for the Dalton samples.

I did not look at them in detail but a quick glance shows PFOS is in the 10-100 ppb range in meat, 600 ppb in serum and and > 2000 ppb in liver.

Does anyone eat deer liver?

### Laurence

----- Forwarded by Laurence Libelo/DC/USEPA/US on 01/12/2010 12:51 PM -----

From: Michael Hom/R4/USEPA/US

Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Lee To:

> Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca Fauver/R4/USEPA/US@EPA, WilliamT Jones/R4/USEPA/US@EPA, William Bush/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Stacey

Haire/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA

01/12/2010 12:38 PM Date:

Dalton 308 Response Dec 23 2009 Progress Report, Deer Sample Results. Have copies of Dalton Subject:

letters to private residence also

### FYI.

Also, Dalton provided copies of their letter to the residences of well results. I recall in our last telephone conference that we requested these letters, but do not remember who exactly asked for them. Who shall I forward these letters to?



Dalton 308 Response Dec 23 2009 Transmittal Letter Monthly Progress Report and of Deer Sample Results.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment E.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment D.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment C.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment B.PDF

Laurence Libelo/DC/USEPA/US 06/21/2010 01:57 PM

To Cathy Fehrenbacher, Kay Austin

CC

bcc

Subject Fw: PFAA III Notes and attendee list

### FYI,

Here are the notes that the interns took at PFAA days.

### ----- Forwarded by Laurence Libelo/DC/USEPA/US on 06/21/2010 01:57 PM -----

From: Kerry Hamilton/DC/USEPA/US
To: Elaine Francis/DC/USEPA/US@EPA

Cc: Barbara Abbott/RTP/USEPA/US@EPA, Chris Corton/RTP/USEPA/US@EPA, Joyce Donohue/DC/USEPA/US@EPA, Irene Dooley/DC/USEPA/US@EPA, dye.janice@epa.gov,

ellington.jackson@epa.gov, Kimberly Harris/R5/USEPA/US@EPA, Ross

Highsmith/RTP/USEPA/US@EPA, hubbard.heidi@epa.gov, Ronald Hunter/DC/USEPA/US@EPA, ireland.sean@epa.gov, krasnic.toni@epa.gov, Christopher Lau/RTP/USEPA/US@EPA, Susan

Laws/RTP/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Andrew

Lindstrom/RTP/USEPA/US@EPA, liu.xiaoyu@epa.gov, mahfouz.amal@epa.gov, Edward

Ohanian/DC/USEPA/US@EPA, Ram Ramabhadran/RTP/USEPA/US@EPA,

roberts.connie@epa.gov, Dina Schreinemachers/RTP/USEPA/US@EPA, dina@epa.gov, Jennifer

Seed/DC/USEPA/US@EPA, strynar.mark@epa.gov, thomas.lee@epa.gov,

washington.john@epa.gov, werno.michael@epa.gov, Doug Wolf/RTP/USEPA/US@EPA

Date: 06/21/2010 08:55 AM

Subject: PFAA III Notes and attendee list

### Hello,

The notes from the recent PFAA Days III Symposium in RTP, NC are attached below for your reference.

Please contact Ron Hunter or Kerry Hamilton if you have any comments or changes you would like to make to the notes.





PFAA Days final notes.doc PFAA EPA day attendees 061110.xls

Thank you,

Kerry Hamilton, MHS ASPH/EPA Environmental Health Fellow U.S. Environmental Protection Agency Office of Research and Development (ORD)

Office: (202) 564-1268 Fax: (202) 565-2568 Hamilton.Kerry@epa.gov

Laurence To chiggins Libelo/DC/USEPA/US

03/08/2010 04:36 PM

bcc

Subject Fw: AFFF paper and PPT

---- Forwarded by Laurence Libelo/DC/USEPA/US on 03/08/2010 04:37 PM -----

From: Laurence Libelo/DC/USEPA/US

To: Sara Pollack/DC/USEPA/US@EPA

Date: 03/04/2010 03:08 PM Subject: AFFF paper and PPT

### Sara,

Here is the paper on eco effects following a AFFF release.



etobicoke creek eco effects of AFFF.pdf

Also after looking at this PPT do you think they might have an environmental contamination issue?



### Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671

Laurence Libelo/DC/USEPA/US 04/07/2010 04:25 PM To chiggins

CC

bcc

Subject Fw: PFC uptake by plants

Here is a powerpoint from a different German plant uptake study:



uptake factors presentation.pdf

### Laurence

Laurence Libelo/DC/USEPA/US To chiggins

CC

bcc

04/07/2010 04:26 PM

Subject Fw: PFOS Uptake in plants from 3M

Here is a 2003 21 day study from 3M that looked at toxicity of PFOS to seven food plant species. They had Wildlife International do the study which included analysis of PFOS in the plant tissues. The analytical method in included as a appendix.

They found a NOEC at about 4 ppm which was their lowest treatment.

3M also included bread, milk, chicken and beef along with green brans and apples in the food items analyzed for PFOA, PFOS, and FOSA in their multicity study in 1999.

There are a couple of other plant tissue studies that looked at what is was in the stuff growing near 3M and DuPont facilities. I will send them also.

Laurence

PDF

PDF

Part%201%20of%20226-1369.pdf Part%202%20of%20226-1369.pdf

Laurence Libelo/DC/USEPA/US

04/07/2010 04:34 PM

To chiggins

cc bcc

Subject Fw: Latest Dalton 308 Summary

Latest Dalton data included: Private wells; Background soil data from 2 off site compost users; and Riverbend & Loopersbend WWTP inf/eff



Dalton 308 Data Summary 03302010.ppt

Laurence Libelo/DC/USEPA/US To chiggins

cc bcc

03/08/2010 05:05 PM

Subject Tyndall Fire site paper

Chris,

Here is the Tyndall fire training site Natural Attenuation paper.

Laurence



\_\_\_\_\_\_

\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671

Laurence Libelo/DC/USEPA/US To Christopher Higgins, craig.butt

03/22/2010 09:52 AM

cc bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

Chris and Craig,

Alabama has issued a discharge permit with some PFCs monitoring requirements. Most of the PFCs are run by MPI or Test America. But there are few that the commercial labs can't analyze. This is the direction they are going and there will be more permits with these in them. For now they have a requirement to run then but nobody has commercial methods up and running.

Can you do them? If so I will let the state know and they will probably contract with you to do the analysis

If you have any idea on how they can get these analyzed it would be very helpful.

Laurence

### Can you analyze

### 9:2 s Florotelomer Alcohol and 11:2 s Florotelomer and the c15-c18 PFCA



\_\_\_\_\_\_

\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671

Laurence Libelo/DC/USEPA/US

.....

02/17/2010 12:43 PM

To Connie Roberts

СС

bcc

Subject Fw: PFCs in MILORGANITE

Connie,

I think I left you off this. Sorry.

----- Forwarded by Laurence Libelo/DC/USEPA/US on 02/16/2010 01:33 PM -----

From: Laurence Libelo/DC/USEPA/US

To: Cathy Fehrenbacher/DC/USEPA/US@EPA

Cc: Toni Krasnic/DC/USEPA/US@EPA, Mark Strynar/RTP/USEPA/US@EPA, John Washington/ATH/USEPA/US@EPA, Andrew Lindstrom/RTP/USEPA/US@EPA, Ross

Highsmith/RTP/USEPA/US@EPA, Rick Stevens/DC/USEPA/US@EPA, Jan Pickrel/DC/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Michael

Hom/R4/USEPA/US@EPA, Mark Garvey/DC/USEPA/US@EPA, Kay Austin/DC/USEPA/US@EPA

Date: 02/16/2010 01:25 PM
Subject: PFCs in MILORGANITE

Cathy,

## nv

Mike Hom in R4 forwarded on results of analysis from the Milwaukee WWTP commercial sludge product MILORGANITE. In addition to the usual mix of priority pollutants and new stuff like PBDEs they looked for PFCs. This is becoming more common as a results of Decatur and we can expect other biosolids to be analyzed across the country.

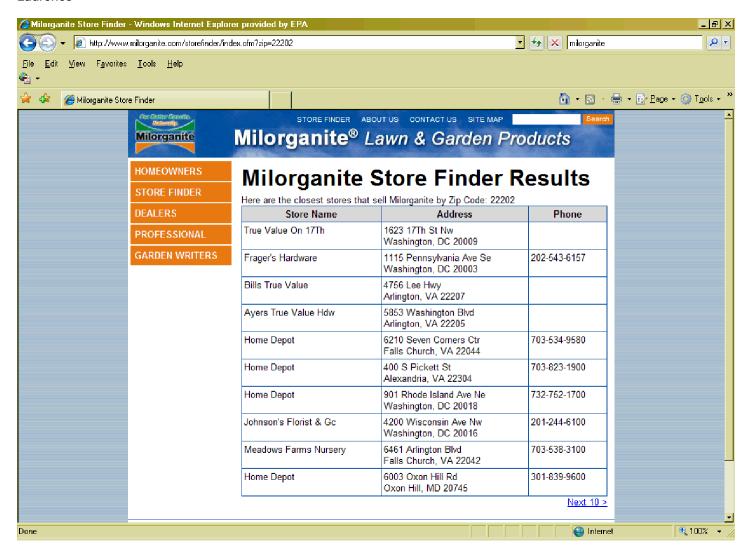
They found alot of PFCs including PFOS > 100 ppb and PFOA and shorter chain stuff at > 10 ppb. (see

page 121). This is in line with what has been reported from other treated WWTP sludges, and is a pretty good example of what we should expect in any biosolids.

### Pen Fluorina Ted Chemicals IVE SUMMARY - Detection Highlights Description The Newest POP" **EXECUTIVE SUMMARY - Detection Highlights** REPORTING ANALYTICAL PARAMETER RESULT LIMIT UNITS METHOD 9013424/979 06/26/09.14:30 Perfluoroundecanoic acid (PFUn 5.8 5.4uq/kg DEN -LC-0012 Perfluorododecanoic acid (PFDo 13 5.4 DEN -LC-0012 ug/kg Perfluoropentanoic acid (PFPA) 19 2.1 ug/kg DEN -LC-0012 Perfluorohexanoic acid (PFHxA) 2.1 ug/kg DEN -LC-0012 Perfluorononanoic acid (PFNA) DEN -LC-0012 2.1 ug/kg Perfluorodecanoic acid (PFDA) 2.1 ug/kg DEN -LC-0012 Perfluorodecane sulfonate (PFD 14 2.1 ug/kg DEN -LC-0012 Perfluorooctanesulfonate 100 2.1 ug/kg DEN -LC-0012 Perfluorooctanoic Acid 5.4 ug/kg DEN -LC-0012-Percent Moisture 0.10 ASTM D 2216-90 9013678/979 01/03/09 Perfluoroundecanoic acid (PFUn 7.7 5.3 ug/kg DEN -LC-0012 Perfluorododecanoic acid (PVDo 12 5.3 ug/kg DEN -LC-0012 DEN -LC-0012 Perfluoropentanoic acid (PFPA) 16 2.1 ug/kg Perfluorohexanoic acid (PFHxA) 17 ug/kg DEN -LC-0012 2.1 Perfluoroheptanoic acid (PFHpA 2.2 2.1 DEN -LC-0012 ug/kg Perfluoronomanoic acid (PFNA) 2.1 ug/kg DEN -LC-0012 Perfluorodecanoic acid (PFDA) 2.1 ug/kg DEN -LC-0012 Perfluorodecane sulfonate (PFD 11. 2.1 DEN -LC-0012 uq/kq Perfluorooctanesulfonate 110 -2.1 ug/kg DEN -LC-0012 Perfluorocctanoic Acid 16 -5.3 ug/kg DEN -LC-0012 Percent Moisture 6.0 0.10ASTM D 2216-90 9013673/979 01/05/08 Perfluoroundecanoic acid (PFUn 5.8. ug/kg DEN '-LC-0012 5.3 Perfluorododecanoic acid (PFDo 6.5 5.3 ug/kg DEN -LC-0012 Perfluoropentanoic acid (PPPA) 11 2.1 DEN -LC-0012 ug/kg Perfluorohexanoic acid (PFHxA) 8.0 2.1ug/kg DEN -LC-0012 Perfluorononanoic acid (PFNA) 4.9 2.1ug/kg DEN -LC-0012 Perfluorodecanoic acid (PFDA) 2.1 ug/kg DEN -LC-0012 Perfluorodecane sulfonate (PFD 11 2.1 DEN -LC-0012 ug/kg Perflueroctanesulfonate 120.-2.1 ug/kg DEN -LC-0012 Perfluorooctanoic Acid 9.3 -5.3 ug/kg DESN -LC-0012 Percent Moisture 6.4 0.10 ASTM D 2216-90

This stuff is widely sold and I think it represents a wide spread source of PFC contamination environmentally and to people who use it. The levels they report are below the OSWER direct contact limits but we probably should be concerned about this stuff being sold everywhere. This is a consumer product rather then a limited biosolids application so it is much more widespread then what we have been dealing with in Decatur or Dalton. Here, for example, are the local stores near my house where it is sold.

### Laurence



### ----- Forwarded by Laurence Libelo/DC/USEPA/US on 02/16/2010 01:02 PM -----

From: Michael Hom/R4/USEPA/US

To: Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Glenn

Adams/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Lee Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca

Fauver/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Ed Sims/R4/USEPA/US@EPA,

Rick Stevens/DC/USEPA/US@EPA, Robert Bastian/DC/USEPA/US@EPA, Mark

Meckes/CI/USEPA/US@EPA, Laura Boczek/CI/USEPA/US@EPA

Date: 02/10/2010 02:54 PM

Subject: Fw: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe

**Acrobat Professional** 

FYI, MMSD is analyzing for PFCs in Milorganite.

----- Forwarded by Michael Hom/R4/USEPA/US on 02/10/2010 02:40 PM -----

From: "Smart, Daphne Y" <DDY@adem.state.al.us>

To: Michael Hom/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA

Cc: "Dean, Glenda" <GLD@adem.state.al.us>, "Ramsey, Samuel" <SRamsey@adem.state.al.us>
Date: 02/10/2010 02:33 PM
Subject: FW: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe

Acrobat Professional

ADEM received the attached biosolids report, which includes PFC testing results. We wanted to ensure that EPA was also aware of this report.

The letter was addressed to the previous Biosolids contact for the State of GA. Mike – as discussed by phone please forward to the new GA contact.

If you need additional information, please do not hesitate to contact me.

Thank you,

Daphne Y. Smart, Chief Municipal Permit Section Water Division

(334) 271-7801



Mission: Assure for all citizens of the state a safe, healthful and productive environment

From: Caldwell, Mattie

Sent: Thursday, February 04, 2010 2:06 PM

To: Smart, Daphne Y

Subject: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe Acrobat

Professional



XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf

### Libelo/DC/USEPA/US

06/24/2010 04:17 PM bcc

Subject GAO info request.

Connie and Gail,

We got an information request that may relate to Decatur and/or Dalton. I am not sure. Can you take a look at this and see if you have anything that is responsive? Thanks.

### Laurence

---- Forwarded by Laurence Libelo/DC/USEPA/US on 06/24/2010 04:15 PM -----

From: Megan Carroll/DC/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA

Cc: Aakruti Shah/DC/USEPA/US@EPA, Cathy Fehrenbacher/DC/USEPA/US@EPA, Toni

Krasnic/DC/USEPA/US@EPA, Priscilla Flattery/DC/USEPA/US@EPA

Date: 06/24/2010 04:05 PM

Subject: Laurence---will you please respond on behalf of you and Cathy?

Laurence---will you please respond on behalf of you and Cathy? I heard from Toni that he doesn't have anything that would be responsive to GAO's request. Do you?

Thank you.

Megan Carroll
Outreach Branch (MC 7408M)
Environmental Assistance Division
Office of Pollution Prevention & Toxics, OCSPP
Tel. 202-564-2814
Fax. 202-564-8197

---- Forwarded by Megan Carroll/DC/USEPA/US on 06/24/2010 04:03 PM -----

From: Megan Carroll/DC/USEPA/US

To: Toni Krasnic/DC/USEPA/US@EPA, Cathy Fehrenbacher/DC/USEPA/US@EPA
Cc: Aakruti Shah/DC/USEPA/US@EPA, Priscilla Flattery/DC/USEPA/US@EPA

Date: 06/24/2010 03:12 PM

Subject: Toni and Cathy---do you have anything that would be responsive?

re: Document request from GAO, due 6/29, re: Review of Food & Agriculture Emergencies: 361204

### Toni and Cathy,

Attached at the bottom of the email string below is a file with a list of documents GAO is requesting related to their review of **Food and Agriculture Emergency Response and Recovery Efforts (361204)**. Do you have anything that is responsive related to work in Decatur, AL? Will you please let me know one way or the other by June 29th? Thank you.

Here is the background on GAO's review:

Job code	361204
Title	Agriculture and Food Emergency Response and R
Source	GAO is beginning this work in response to a requestion Subcommittee on Oversight of Government Mana Workforce, and the District of Columbia, Commit and Governmental Affairs.
Objectives	<ul> <li>To what extent has the Department of Agricul its emergency support responsibilities for responsibilitied in Homeland Security Presidential Di Support Function #11?</li> <li>What challenges exist, if any, to USDA's imple responsibilities?</li> <li>This engagement will include a review of EPA's contained the implementation of these responsibilities and with may affect such coordination efforts.</li> </ul>

Megan Carroll
Outreach Branch (MC 7408M)
Environmental Assistance Division
Office of Pollution Prevention & Toxics, OCSPP
Tel. 202-564-2814
Fax. 202-564-8197

---- Forwarded by Megan Carroll/DC/USEPA/US on 06/24/2010 03:05 PM -----

From: Janet Weiner/DC/USEPA/US

To: Deborah Hartman < Hartman. Deborah@epamail.epa.gov>, Amaris Johnson/DC/USEPA/US@EPA

Cc: Aakruti Shah/DC/USEPA/US@EPA, Megan Carroll/DC/USEPA/US@EPA, Jay

Ellenberger/DC/USEPA/US@EPA

Date: 06/17/2010 02:41 PM

Subject: Document request from GAO, due 6/30, re: Review of Food & Agriculture Emergencies: 361204

### Audit team:

The participants on the call were already sent this document directly from Bob, but wanted to keep you in the loop since it is due 6/30. OPP, I assume Jay E will be your primary contact? OPPT, can you please do a quick review to be sure you do not have any material related to this request?

Let me know if I can help with anything on this.

Thanks, Janet

Janet LaFiandra Weiner, Attorney/Advisor (202) 564-2309 weiner.janet@epa.gov

Senior Budget Office Office of Chemical Safety and Pollution Prevention Suite 3366-3425, EPA East Bldg Mailcode 7101M, 1200 Constitution Avenue, NW Washington, DC 20460

----- Forwarded by Janet Weiner/DC/USEPA/US on 06/17/2010 02:36 PM -----

From: Bobbie Trent/DC/USEPA/US

To: Johnsie Webster/DC/USEPA/US@EPA, Janet Weiner/DC/USEPA/US@EPA, Caroline

Brown/DC/USEPA/US@EPA, Deborah Heckman/DC/USEPA/US@EPA

Cc: Jay Ellenberger/DC/USEPA/US@EPA, Paul Lemieux/RTP/USEPA/US@EPA, Sharon

White/DC/USEPA/US@EPA, Deborah Hartman/DC/USEPA/US@EPA, Amaris Johnson/DC/USEPA/US@EPA, Peter Evanko/DC/USEPA/US@EPA, MarkT

Howard/DC/USEPA/US@EPA

Date: 06/17/2010 02:34 PM

Subject: Fw: GAO Review of Food & Agriculture Emergencies: 361204

### Good Afternoon:

Please see GAO's follow up list of documents and contact requests, please note that GAO would like this information by June 30, 2010, please let me know if you expect any significant delays in collecting this data, thank you.



Bob Trent, GAO Liaison Team Lead OCFO-GAO@EPA.GOV Office of Budget 202-566-0983 phone; 202-564-1839 fax Trent.Bobbie@epa.gov

### ----- Forwarded by Bobbie Trent/DC/USEPA/US on 06/17/2010 02:29 PM -----

From: "Amanda E Krause" <KrauseA@gao.gov>
To: Bobbie Trent/DC/USEPA/US@EPA
Cc: "William C Colwell" <ColwellW@GAO.GOV>

Date: 06/17/2010 01:25 PM

Subject: GAO Review of Food & Agriculture Emergencies: 361204

### Hi Bob,

It was nice meeting you at our entrance conference yesterday. As discussed, attached is an updated list of documents and information that we are requesting. We hope that these are fairly easy to provide; if you are finding that you need to gather dozens of documents for an item on the list, give me a call and we can discuss what documents we actually need or are of highest priority. We will gladly take any documents as you find them, but ideally we

will have everything by June 30.

Thanks again for all your help!

Best, Amanda

Amanda Krause, Senior Analyst Natural Resources and Environment U.S. Government Accountability Office 202-512-3808 krausea@gao.gov



GAOHQ-3947938-v1-361204\_-\_DOCUMENT\_REQUEST\_TO\_EPA-\_JUNE\_16\_2010.DOC

Laurence Libelo/DC/USEPA/US

03/01/2010 11:10 AM

To Deborah Sherer, Mark Strynar, Andrew Lindstrom

cc bcc

Subject Fw: Interesting AFFF PPT

After looking at this PPT do you think they might have an environmental contamination issue? Connie or Brad, do you know who in Region 8 might be working on this?



Laurence Libelo/DC/USEPA/US

CC

To Dr. Laurence Libelo

bcc

01/22/2010 10:10 AM

Subject Fw: Requested Article/Document Attached: Am J

Gastroenterol; advance online publication 15 Dec 2009 pfoa

liver

From: Michele Hadburg/RTP/USEPA/US
To: Laurence Libelo/DC/USEPA/US@EPA

Date: 01/22/2010 09:57 AM

Subject: Requested Article/Document Attached: Am J Gastroenterol; advance online publication 15 Dec

2009

The article/document you requested is attached. Please reply if you have any questions or problems with the file.



investigation of the associations between low-dose....pdf

Note: The attached material may be protected by US Copyright (Title 17 US Code).

We hope you'll take a moment to let us know how satisfied you are with the EPA-RTP Library's services by responding to a short questionnaire. Please click on the link below to let us know how we are doing. We appreciate your feedback! http://www.surveymonkey.com/s.asp?u=878843202145

Michele Hadburg
Interlibrary Loan Intern, US EPA Library
UNC Contract Staff, C267-01
109 Alexander Drive
Research Triangle Park, NC 27711

Phone: 919/541-2777 Fax: 919/541-1405

Email: hadburg.michele@epa.gov

**Laurence** To edshaefe

Libelo/DC/USEPA/US

03/17/2010 01:27 PM

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

Fd

Can you please take a look at the list on analytes on the proposed permit and let me know which WI can run?

bcc

**Thanks** 

Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553



Laurence Libelo/DC/USEPA/US

03/17/2010 03:11 PM

To eschaefe

CC

bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

Ed,

Can you please take a look at the list on analytes on the proposed permit and let me know which WI can run?

Thanks

Laurence

\_\_\_\_\_\_

\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671



03/17/2010 11:45 AM

cc bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

ADEM is trying to determine who is able to analyze these remaining PFC parameters. Please response to Scott directly, and 'cc' me, since today is my only day in the office until next Monday. Thanks!



Laurence Libelo/DC/USEPA/US

03/17/2010 01:23 PM

To eshaefe

CC

bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

Ed.

Can you please take a look at the list on analytes on the proposed permit and let me know which WI can run?

Thanks

Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671



Laurence Libelo/DC/USEPA/US

03/17/2010 01:19 PM

To eshaef

СС

bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

Ed,

Can you please take a look at the list on analytes on the proposed permit and let me know which WI can run?

**Thanks** 

Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671



Laurence Libelo/DC/USEPA/US 02/22/2010 09:48 PM

To Gail Mitchell cc

bcc

200

Subject Fw: action needed ASAP

Gail,

Chris Lau has sent the latest draft of the PFAA days program for comments. Can you please take a look at it and let us know if you have suggestions/comments?

Also, I would like to propose that you co-chair and lead the discussion during the Wednesday afternoon 5:30 focus group session on Govt. issues. This is the session we talked about where states and regional offices get time to talk about what they are doing and their ongoing needs. I think you have a much better understanding of the issues that folks outside of Washington are dealing with that any of us. Andy, Toni and I will help but I think it would be better to have you and someone from Environment or Health Canada or another region or state as the session leaders. Someone from Minnesota or the Great Lakes program might be good. Or someone from Region 3? What do you think?

#### Laurence

#### Laurence

-----Forwarded by Laurence Libelo/DC/USEPA/US on 02/22/2010 09:40PM -----

To: Andrew Lindstrom/RTP/USEPA/US@EPA, Barbara Abbott/RTP/USEPA/US@EPA, Carolyn Acheson/CI/USEPA/US@EPA, Cathy Fehrenbacher/DC/USEPA/US@EPA, Christopher Lau/RTP/USEPA/US@EPA, Doug Wolf/RTP/USEPA/US@EPA, Elaine Francis/DC/USEPA/US@EPA, Jennifer Seed/DC/USEPA/US@EPA, John Rogers/RTP/USEPA/US@EPA, Joyce Donohue/DC/USEPA/US@EPA, Kerry Hamilton/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Marc Mills/CI/USEPA/US@EPA, Ronald Hunter/DC/USEPA/US@EPA,

Ross Highsmith/RTP/USEPA/US@EPA From: Christopher Lau/RTP/USEPA/US

Date: 02/22/2010 04:15PM Subject: action needed ASAP

Dear Members of the Organizing Committee:

Attached please find drafts of PFAA Days III background and agenda, and the cover design for the symposium provided by the NHEERL graphics team.

(See attached file: Background 2-22.doc) (See attached file: PFAA Days III plan 2-21.doc) (See attached file: PFAA 2010 identity graphic.jpg)

Please make comments and changes as you see fit and return your suggestions to me in the next couple of days. I need to work with the NHEERL communication team to develop a PFAA Days III website for registration, and we need to post the background and agenda. I am hoping to have the website go live next week. so that we can advertize the meeting at SOT.

So far, I have all the session leaders committed to the meeting (except Kerry Dearfield whom I haven't contacted yet). I need to work with each of them to finalize the roster of speakers and to invite them formally (especially those outside of EPA).

Please pay attention to the two focus groups that I have taken the liberty of organizing. If approved, they can be held on separate days (as drafted) or concurrently on June 9. Let me know how you feel about the options.

Thanks.

Chris







Background 2-22.doc

PFAA Days III plan 2-21.doc

PFAA 2010 identity graphic.jpg

Laurence Libelo/DC/USEPA/US

01/13/2010 12:57 PM

To Gail Mitchell

СС

bcc

Subject more AFFF info



Laurence Libelo/DC/USEPA/US

CC

01/13/2010 12:40 PM

bcc

Subject paper of Tyndall AFFF

To Gail Mitchell

Gail.

Here is a paper we wrote on the AFFF site at Tyndall. Audrey Levine is now the ORD national program director for water here in DC.

As far as I know the samples we sent to Jennifer Field at OR. St. are the only other analysis for PFC that has been done on the Tyndall AFFF sites.

When you drill wells in FL you have to file a completion report with the Water Management District. It should be possible to get a list of all wells with screen depth and length as well as Lat/Long info if necessary.

Laurence



Laurence Libelo/DC/USEPA/US To Gail Mitchell

03/17/2010 02:53 PM

cc bcc

Subject Fw: Cincinnati Water works Ohio river intake Perfluorochemical data

Gail,

FYI - The Ohio River Valley Sanitary Commission is about to release a report of PFCs in the Ohio River. They will report finding elevated PFCs - up to several ppb PFOS and others PFCs at spots on the river with most places having low (0.10-0.30 levels).

Several places in KY seem to be big sources with levels > 1ppb PFOS.

I have not seen the draft report yet but others including industry and utilities have. ORSANCO told me they hope to have it out by the end of the month.

We have gotten some data from the Cincinnati Water Works that shows elevated PFOA in the Ohio river. In their initial analysis of the raw river water in 2005 they found 0.10 ppb. Over the last few years they have seen a decrease but the river still has > 0.01 ppb PFOA.

In DuPont monitoring they found elevated PFOA > 1 ppb close to the Parkersburg plant and 0.2 ppb 18 miles downstream.

Other then these I don't know of any PFC data on the Ohio river.

The good news is that Cincinnati has a really good GAC system that appears to be removing the PFOA well.

The bad news is that most of the water systems in OH, WV and KY don't have good GAC. And that the shorter chain stuff is not efficiently removed by GAC

----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/08/2010 06:29 PM -----

From: "Metz, Debbie" < Debbie. Metz@gcww.cincinnati-oh.gov>

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 03/08/2010 05:01 PM Subject: RE: Perfluorochemical data

Attached is our table. Sorry for the delay. Reconstructing the GAC run days took a little while.

----Original Message----

From: Libelo.Laurence@epamail.epa.gov [mailto:Libelo.Laurence@epamail.epa.gov] Sent: Tuesday, March 02, 2010 1:39 PM

To: Metz, Debbie

Subject: RE: Perfluorochemical data



Laurence Libelo/DC/USEPA/US

03/10/2010 11:22 AM

To Gail Mitchell

СС

bcc

Subject Fw: Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and WWTPs Results

Gail,

Is this information public?

Can I send it to a person in the Minn. Dept. of Health? He his going to give a talk at PFAA days on PFCs in wastewater and wants to know what is going on in Decatur and Dalton. He has been looking at the web site and asked if he could see the data.

If it is OK I would like to send him info on Decatur also.

Thanks.

#### Laurence

---- Forwarded by Laurence Libelo/DC/USEPA/US on 03/10/2010 11:20 AM -----

From: Michael Hom/R4/USEPA/US

To: Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Lee

Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca Fauver/R4/USEPA/US@EPA, WilliamT Jones/R4/USEPA/US@EPA, William Bush/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Stacey Haire/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Frank

Ney/R4/USEPA/US@EPA

Date: 03/04/2010 03:47 PM

Subject: Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and

WWTPs Results

#### FYI. Latest results.

PDF

Dalton 308 Response Feb 24 2010 Monthly Progress Report and LAS and Wildlife Data.PDF



Dalton 308 Response Feb 24 2010 Attachment B 2 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment B 1 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment F WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment E WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment D Wild Turkey Serum.PDF



Dalton 308 Response Feb 24 2010 Attachment C Wild Turkey Muscle and Liver.PDF



Dalton 308 Response Feb 24 2010 Attachment A LAS Monitoring Well and Surface Water.PDF

Laurence Libelo/DC/USEPA/US To Gail Mitchell

02/24/2010 04:44 PM

cc Lee Thomas

bcc

Subject point of use water treatment report

Gail,

Here is the Minn report on point of use treatment devices for PFCs.





water treatment - point of use device report summary.pdf water treatment - point of use device report.pdf

Laurence

.-----

\_\_\_\_\_

E. Laurence Libelo, Ph.D., PG Senior Environmental Engineer Exposure Assessment Branch Office of Pollution Prevention and Toxics U.S. Environmental Protection Agency OPPTS/OPPT/EETD/EAB 202-564-8553 FAX 202-546-8671

Laurence To james.kelly

**Libelo/DC/USEPA/US** 03/26/2010 05:09 PM

cc bcc

Subject Fur Delter 200 Decrease

Subject Fw: Dalton 308 Response Dec 23 2009 Progress Report, Deer Sample Results.

The data will eventually be on the Region 4 web site but it is not there yet. Here is a copy.

---- Forwarded by Laurence Libelo/DC/USEPA/US on 03/26/2010 05:06 PM -----

From: Gail Mitchell/R4/USEPA/US

To: Connie Roberts/R4/USEPA/US@EPA, MAnnette Jones/R4/USEPA/US@EPA
Cc: Lee Thomas/R4/USEPA/US@EPA, Michael Hom/R4/USEPA/US@EPA, Laurence

Libelo/DC/USEPA/US@EPA

Date: 03/02/2010 02:46 PM

Subject: Fw: Dalton 308 Response Dec 23 2009 Progress Report, Deer Sample Results.

Connie - Laurence wants to be able to reference the deer meat results so he needs us to post the reports on our website. It would be good to post all of the Dalton results on the website, but we can start with the reports of the deer meat analyses. Please work with Annette Jones (while Mary is out) to have these reports posted to the website. You can place these under the section on Sample Results. I have a hard copy of the reports for your use in getting clearance on posting these. Thanks!

Gail Mitchell, Deputy Director Water Protection Division USEPA Region 4 (Atlanta, GA)

# 404/562-9234 404/562-9318 (fax)

----- Forwarded by Gail Mitchell/R4/USEPA/US on 03/02/2010 02:39 PM -----

From: Lee Thomas/R4/USEPA/US
To: Gail Mitchell/R4/USEPA/US@EPA
Cc: Connie Roberts/R4/USEPA/US@EPA

Date: 03/02/2010 01:40 PM

Subject: Fw: Dalton 308 Response Dec 23 2009 Progress Report, Deer Sample Results. Have copies of

Dalton letters to private residence also

## Gail,

Here are the deer sampling results for Dalton.

Lee Thomas thomas.lee@epa.gov 404.562.9786 Ground-Water Hydrologist Water Protection Division United States Environmental Protection Agency, Region 4 61 Forsyth Street Atlanta, GA 30303

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----- Forwarded by Lee Thomas/R4/USEPA/US on 03/02/2010 01:39 PM -----

From: Michael Hom/R4/USEPA/US

To: Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Lee

Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca Fauver/R4/USEPA/US@EPA, WilliamT Jones/R4/USEPA/US@EPA, William Bush/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Stacey Haire/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA

Date: 01/12/2010 12:38 PM

Subject: Dalton 308 Response Dec 23 2009 Progress Report, Deer Sample Results. Have copies of Dalton

letters to private residence also

### FYI.

Also, Dalton provided copies of their letter to the residences of well results. I recall in our last telephone conference that we requested these letters, but do not remember who exactly asked for them. Who shall I forward these letters to?



Dalton 308 Response Dec 23 2009 Transmittal Letter Monthly Progress Report and of Deer Sample Results.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment E.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment D.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment C.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment B.PDF

Laurence Libelo/DC/USEPA/US

04/13/2010 10:17 AM

To Jed Costanza

cc David Lynch

bcc

Subject Re: PFCs in Cheicken Eggs

Because it is in the food they eat and the water they drink. This may be from the bags the fed is packed in or from environmental exposures.

Also probably because PFCs in air are absorbed pretty easily. FTOHs are ubiquitous in air world wide and other PFCs are probably also especially in China.

But not only in China. Chicken eggs in Europe and the US also have elevated levels.



egg paper -.pdf

Jed Costanza

There are a couple of classic cases of thousands of ducks and chickens dying because PTFE coatings on light bulbs used in the poultry houses burned off and released the PFIB and other monomers (now we know these include PFOA and other acids).

Wild bird eggs also show high levels with birds from industrial areas higher then other areas. Predator birds have the highest but all birds have some.

04/13/2010 10:06:31 AM

From: Jed Costanza/DC/USEPA/US
To: Jed Costanza/DC/USEPA/US
Laurence Libelo/DC/USEPA/US@EPA, David Lynch/DC/USEPA/US@EPA

Why are PFCs in Chinese chicken eggs...

Date: 04/13/2010 10:06 AM Subject: PFCs in Cheicken Eggs

Why are PFCs in Chinese chicken eggs?

http://pubs.acs.org/doi/abs/10.1021/es1000159

Laurence

Libelo/DC/USEPA/US

To John Washington

03/24/2010 04:09 PM

СС bcc

Subject Diakin discharge flow rates and PFOA levels

Here is a report from Diakin on their discharges prior to 2004. On page 4 there is a table of flow rate and concentration.



4-7-2004 Daikin analytical report submissio

Laurence To John Washington

Libelo/DC/USEPA/US 03/24/2010 03:50 PM

CC

bcc

Subject BPAs customer list

# BPAs customer list

----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/24/2010 03:49 PM -----

From: Laurence Libelo/DC/USEPA/US To: Michael Hom/R4/USEPA/US@EPA

03/20/2009 11:26 AM Date:

Fw: BPA Subject:

#### Mike,

## The list did come from DU.

----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/19/2009 03:03 PM -----

From: Sean Ireland/R4/USEPA/US

To: Michael Hom/R4/USEPA/US@EPA

Cc: Laurence Libelo/DC/USEPA/US@EPA, William Bush/R4/USEPA/US@EPA

Date: 12/04/2008 01:03 PM

Subject: Re: Fw: BPA

I'm surprised they didn't try to claim CBI on something like this (or whatever acronym Decatur/MDEQ might use).

Sean Ireland **Environmental Engineer** Water Programs Enforcement U.S. EPA, Region 4 (404) 562-9776

(404) 562-9729 fax

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Michael Hom/R4/USEPA/US

# Michael Hom/R4/USEPA/US

12/04/2008 12:25 PM

To William Bush/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA

CC

Subject Fw: BPA

----- Forwarded by Michael Hom/R4/USEPA/US on 12/04/2008 12:23 PM -----

"Tom Cleveland"

**<TCleveland@decaturutilities.** To <gld@adem.state.al.us>, Michael Hom/R4/USEPA/US@EPA com>

.....

CC

12/04/2008 12:04 PM Subject BPA

Here is some information regarding BPA's customer list. May be some sources of PFC's in this list. We are not sure. Currently, BPA is closed pending a buyout from a company called Liquid Environmental.

We would still welcome an EPA inspection of this site.

**Thanks** 

Tom

Tom Cleveland, P.E. Plants and Engineering Manager Decatur Utilities 256-301-4605 office 256-654-1630 cellular 256-552-1412 fax

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BPA\_DMR\_REVIEWS.xls

Laurence To John Washington

Libelo/DC/USEPA/US cc 03/24/2010 03:51 PM bcc

Subject Fw: Decatur collection system sampling results

----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/24/2010 03:51 PM -----

From: Sean Ireland/R4/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA
Cc: Michael Hom/R4/USEPA/US@EPA

Date: 01/28/2010 12:17 PM

Subject: Decatur collection system sampling results

PDF

Read this first: ADEM request for results, 2010-01-20.PDF

PDF

And the response next: DU collection system results, 2010-01-27.pdf

Laurence To John Washington Libelo/DC/USEPA/US

03/24/2010 02:58 PM

cc bcc

Subject Fw: Flow data

---- Forwarded by Laurence Libelo/DC/USEPA/US on 03/24/2010 02:58 PM -----

From: <werling@daikin-america.com>

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 03/24/2010 02:08 PM

Subject: Flow data

Here is the excel sheet with the flow data for DSN009

(See attached file: DMR Summary 2003 - 2006 for DSN009.xls)

Regards,

Ralph Werling Environmental Manager Daikin America, Inc MDA Manufacturing, Inc 256-306-5000

This e-mail and/or its attachments may contain information that is privileged, confidential and proprietary to Daikin America, Inc. You are hereby notified that any dissemination, distribution, or copying of this communication is prohibited. If you have received this communication in error, please immediately delete it from your computer and notify the sender



by replying to this electronic e-mail. DMR Summary 2003 · 2006 for DSN009.xls

Laurence To John Washington

Libelo/DC/USEPA/US cc 03/24/2010 03:53 PM bcc

Subject Fw: PFC data for Decatur, from ADEM

Misc. sampling data

---- Forwarded by Laurence Libelo/DC/USEPA/US on 03/24/2010 03:53 PM -----

From: Sean Ireland/R4/USEPA/US

To: Michael Hom/R4/USEPA/US@EPA, Lee Thomas/R4/USEPA/US@EPA, Laurence

Libelo/DC/USEPA/US@EPA

Date: 12/15/2009 05:38 PM

Subject: PFC data for Decatur, from ADEM



PFCs comparison xls

Laurence To John Washington

**Libelo/DC/USEPA/US**03/18/2010 05:07 PM

cc bcc

Subject Fw: TRP Docket Submission: Comments on Washington et al.

Hi John,

The industry guys have sent in comments on you polymer paper. Nothing too exciting and new.

Laurence

# ----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/18/2010 05:06 PM -----

From: Katie Smythe <ksmythe@mindspring.com>

To: Jim Willis/DC/USEPA/US@EPA, Cathy Fehrenbacher/DC/USEPA/US@EPA, David

Lynch/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA

Date: 03/18/2010 04:47 PM

Subject: TRP Docket Submission: Comments on Washington et al.

The Telomer Research Program (TRP) has submitted comments on the paper by Washington et al., "Degradability of an Acrylate-Linked, Fluorotelomer Polymer in Soil," for posting to the EPA Docket #EPA-HQ-OPPT-2003-0012. These comments supplement the published comments of Russell et al. (ES&T, 2010) and focus on the following areas: analyte recovery, the Kd supporting the exhaustive soil extractions, limitations of the data used for kinetic model analyses, the concept of fluorophilicity, and degradation pathways. Please see the attached comments.

Best regards, Katie Smythe TRP Administrator



(ksmythe@regnet.com) 2010-March-17 TRP Docket Submission Letter.pdf



2010-March-15 TRP Comments for USEPA Docket Submission.pdf

Laurence Libelo/DC/USEPA/US To John Washington

04/06/2010 04:45 PM

cc bcc

Subject here is the doc

3M test plan 2001,pdf

Laurence Libelo/DC/USEPA/US To John Washington

CC

01/27/2010 10:39 AM

bcc

Subject Re: Fw: report

John,

I have this report somewhere. It is from our AR226 docket. As I remember it is pretty interesting. 3M hired Geisy to look for PFCs and he found them PFOS, FOSA, PFOA etc in lots of media including fish and sludge. Let me see if I can find where I put it and I will send it to you.

In case you have not seen everything in the AR226 docket here is the index. If you search it you will see

that 3M did a lot of analysis back in 1999-2001. Most of this showed up in the Multi-city study but not all.



Unfortunately AR226 is not available on line. If you contact the docket folks they can send you a set of CDs that include all the documents.

AR226-1030 included a lot of reports from 3M that were submitted in a really big data dump when they were dealing with the enforcement folks.

I have the 1030 reports on a set of CDs but am not sure where I put it. I probably need to clean my cube to find it but will get back to you later today

#### Laurence

John Washington Hey Laurence, Do you know anything... 01/27/2010 09:45:58 AM

From: John Washington/ATH/USEPA/US
To: Laurence Libelo/DC/USEPA/US@EPA

Date: 01/27/2010 09:45 AM

Subject: Fw: report

# Hey Laurence,

Do you know anything about the below report? It looks interesting for historical perspective. "Administrative record" seems very vague to me -- -- don't spend time on it if you don't already know where to find it.

# Thanks,

# John

---- Forwarded by John Washington/ATH/USEPA/US on 01/27/2010 09:43 AM -----

From: Pete Lasier <plassier@usgs.gov>

To: John Washington/ATH/USEPA/US@EPA

Date: 01/27/2010 09:41 AM

Subject: report

### Hi John,

Do you have or can you get the following report? It apparently documents high PFOS levels in Decatur sediments. If not, I'll have our secretary start to track it down. (I assume these EPA reports are easier for you to get - but maybe not.)

## Pete

Giesy, JP and Newsted, JL (2001). Selected Fluorochemicals in the Decatur, Alabama Area. Prepared for 3M, St Paul, MN. In US EPA Administrative Record AR226-1030A.

Laurence Libelo/DC/USEPA/US To John Washington

03/24/2010 03:02 PM

bcc

Subject

1999 sample results



Laurence Libelo/DC/USEPA/US

03/23/2010 10:21 AM

To John Washington

cc Hoon Yoo, Jack Jones

bcc

Subject Fw: Neo Industries

Hey John,

I am still looking for the Diakin report in a non cbi form. I will send it as soon as I can dig it out. If I can't I will compile the info as best I can from the CBI reports.

The chrome shop is not Delphi. We sent them a 308 letter and got info back that they didn't discharge much. I will go back as look at the details for them. The other one is Neo Industries. They are not on the current discharger list as they don't have a current permit.

Here is is some info from the AL enforcement guys. Please keep this private as much as possible. As the spread sheet shows there is all nondetects. Knowing that the water down there has some PFCs this seem a bit odd.

# Laurence

---- Forwarded by Laurence Libelo/DC/USEPA/US on 03/23/2010 10:02 AM -----

From: Sean Ireland/R4/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 03/17/2010 05:05 PM Subject: Fw: Neo Industries

---- Forwarded by Sean Ireland/R4/USEPA/US on 03/17/2010 05:05 PM -----

From: "Ramsey, Samuel" <SRamsey@adem.state.al.us>

To: Sean Ireland/R4/USEPA/US@EPA, Tom Cleveland <TCleveland@decaturutilities.com>

Date: 03/16/2010 02:07 PM Subject: FW: Neo Industries Scott Ramsey Industrial Section Industrial/Municipal Branch Water Division (334) 274-4220

From: Dean, Glenda

Sent: Saturday, March 13, 2010 2:51 PM

To: Ramsey, Samuel

**Cc:** Sanderson, Eric; Poolos, Ed **Subject:** FW: Neo Industries

Importance: High

# Scott,

We should provide this information to NEO, Tom Cleveland at DU and Sean Ireland at EPA. Also, I understand that Neo is a metalfinisher and, therefore, needs an SID permit. We need to notify them, if we haven't already done so. Note the results for Pb are above the MF EGLs.

Glenda L. Dean, Chief NPDES Permit Branch Water Division gld@adem.state.al.us 334-270-5602 334-279-3051 (fax)



Mission: Assure for all citizens of the State a safe, healthful and productive environment

From: Poolos, Ed

**Sent:** Thursday, March 11, 2010 8:02 AM

To: Dean, Glenda Cc: Jenkins, Steve Subject: Neo Industries

# Glenda,

Attached are the results of the sampling event at NEO Industries from February 9th.

The attachments are:

- 1) The PFOA Summary sheet
- 2) The ADEM Lab data Reminder we collected the parameters that were on the expired NEO permit
- 3) The memo from sample collectors regarding sampling event
- 4) The final report from MPI concerning the PFC data

If you have any questions or need anything just let me know,









Laurence Libelo/DC/USEPA/US

03/23/2010 10:36 AM

To John Washington

cc Hoon Yoo, Jack Jones

bcc

Subject redacted Diakin report

Here is a redacted versio nof the Diakin report on their emmision reductions. It is not too helpful probably.



Diakin 2005 reduction report EPA-HQ-OPPT-2003-0012-0983[1].pdf

Laurence Libelo/DC/USEPA/US

03/22/2010 01:58 PM

To John Washington

cc Jack Jones

bcc

Subject Re: Requesting references ASAP

John,

This statement is based on a fairly large number of documnents and discussions with Industry. Of the total know sources Diakin was by far the largetts. They sent several tons of PFCs in 2005-6 and stopped sending any in late 2006. The others combined add up to maybe several hundred kilos.

Toni does not the information on what was discharged into the Decatur WWTP. He has access to the dockets but much of this information is in reports submitted to me and to my office. Mike Hom has some in the form of the 308 letter responses. Some is in the R4 web site and in the Regional enforcement dockets. Most of it is not public in any reasonable accessible way. I am the only one who has read all of the documents and I have most of them in my office. I have started scanning them and will send them to you as I am able.

At Cathy's request I am preparing a review of the known, quantified sources to the Decatur WWTP. They include 3M, Diakin, Torey and the Morgaqn County landfill.

There are other known or suspected sources that went off line in 2006 or 2007. Biological Processors of America was a suspected large source but their discharges are not well know. They are under a superfund cleanup now. I have their records and can send you the pile but it is very large. They took PFC containing waste and the on-scene coordinator has told me that the waste vats on site have PFCs. I will see if I can find the specifics in the documentation.

A chrome plater ceased operations in about 2006. This is now an enforcement case and not public. R4 lawyers are working on figuring out what they did and if they did indeed stop discharging or only did not comply with their permits.

Here are several pages from the Torey 308 response showing the decrease in PFOA from 1240 ppb to 13 ppb between 2004 and 2007. We believe that this was a result of changing from "dirty" dispersion

chemistries during this period. This was when OPPT was working with Industry to reduce the PFOA levels in their products and we have CBI data showing that the levels went down several orders of magnitude. The industry in generally was being cleaned up to remove impurities and to reduce discharges. As this shift took place levels of PFCs in effluent in Decatur and elsewhere were seen to decrease greatly.



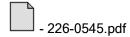
Torey 308 letter 002.tif

Here several pages from the Diakin 308 letter response. They document what the companies were discharging. DSN009 was the discharge to the WWTP. In late 2006 Diakin shut this off and began incinerating. I will send a document from Diakin that describes the mass discharged.



Diakin 308 letter response 001.tif

Here is a 3M report on what they were sending to the WWTP early on. Look at table 5. I will send a number of other documents as I get them scanned.



3M data on PFOA is in the Date Assessment report in the docket and in the quarterly reports. PFOS. FOSA and PFBS are in another report that I wil scan.

EPA-HQ-OPPT-2004-0112-0108

### Laurence

John Washington Laurence, In your comments on my dr... 03/22/2010 12:03:46 PM

From: John Washington/ATH/USEPA/US
To: Laurence Libelo/DC/USEPA/US@EPA
Cc: Jack Jones/ATH/USEPA/US@EPA

Date: 03/22/2010 12:03 PM
Subject: Requesting references ASAP

#### Laurence,

In your comments on my draft manuscript, you inserted this statement: "Known inputs into the WWTP from late 2006 onward were 3 or more orders of magnitude less than those in 2002-2006 and believed to be somewhat higher than 2002 and before."

This might be quite important. Can you please identify **specifically** the references upon which you base this statement? If you have PDFs of these documents, would you please send them to me? If you do not have these references, please send me whatever identification I will need to identify them in order to request them from Toni Krasnic.

Thanks, John		
John Washington		

United States Environmental Protection Agency National Exposure Research Laboratory Ecosystems Research Division 960 College Station Road Athens, GA 30606

phone: (706) 355-8227 fax: (706) 355-8202

email: washington.john@epa.gov http://www.epa.gov/athens/

Laurence Libelo/DC/USEPA/US

JSEPA/US Nakayama, Marc Mills

03/26/2010 04:41 PM

bcc

Subject Fw: 8(e) notice from 3M: Fluoropolymer Generation Test

To John Washington, Mark Strynar, Andrew Lindstrom, Shoji

Method Development Experiments

FYI,

## Comments?

It looks like the PTFE is degrading to produce PFOA. Or maybe it is not. Hard to tell. I bet Industry will say it is either experimental problems or that the heating is just driving more residuals out of the polymer

### Laurence

----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/26/2010 04:38 PM -----

From: Toni Krasnic/DC/USEPA/US

To: Greg Fritz/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, David

Lynch/DC/USEPA/US@EPA

Cc: Cathy Fehrenbacher/DC/USEPA/US@EPA, Diane Sheridan/DC/USEPA/US@EPA, Katherine

Sleasman/DC/USEPA/US@EPA

Date: 03/26/2010 03:30 PM

Subject: 8(e) notice from 3M: Fluoropolymer Generation Test Method Development Experiments

Hi,

We just received this study from 3M. FMG (Mark Greenwood is the lead) intends to come in April to discuss the study. Please let me know what you think and whether we need to schedule a meeting to discuss.

Thanks,

tk 564.0984



Laurence Libelo/DC/USEPA/US 03/22/2010 10:50 AM To Kannan Kurunthachalam

CC

bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

Hi Kannan

I have been asked to help the Alabama DEP and a landfill Decatur with PFC analytical questions.

Alabama has issued a discharge permit with some PFCs monitoring requirements. Most of the PFCs can by run by MPI or Test America. But there are few that the commercial labs can't analyze. This is the direction the state is apparently going and there will be more permits with these in them. For now they have a requirement to run then but nobody has commercial methods up and running.

Can you do them? If so I will let the state know and they will probably contract with you to do the analysis. If not do you know of anyone who might be able to?

If you have any idea on how they can get these analyzed it would be very helpful.

**Thanks** 

Laurence

Can you analyze

9:2 s Florotelomer Alcohol and 11:2 s Florotelomer and the c15-c18 PFCA



\_\_\_\_\_\_

==========

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671

Laurence Libelo/DC/USEPA/US 12/15/2009 06:19 PM To Kay Austin

cc Cathy Fehrenbacher

bcc

Subject Fw: PFC Stakeholder Contact Tables.

# Kay,

Here is some more info from R5 and others.

#### Laurence

----Forwarded by Laurence Libelo/DC/USEPA/US on 12/15/2009 06:18PM -----

To: Laurence Libelo/DC/USEPA/US@EPA From: Bradley Grams/R5/USEPA/US

Date: 12/15/2009 03:53PM

Subject: PFC Stakeholder Contact Tables.

#### Hi Laurence:

Here are the PFC Stakeholder Tables I have so far. The first MS Excel File is directed to Regional, State and local contacts for PFC Issues between Regions 2-5. The second file is Region 5 and GLNPO's Great Lakes Binational Toxics Strategy stakeholder database; it is a collection of all contacts who've elected to be a part Great Lakes Basin (Regions 2, 3 and 5) voluntary toxics reduction and pollution prevention activities, regardless of chemical. The third file are attendees from the last meeting (December 1-3, 2009).

## Thanks!

## Cheers,

Bradley Randall Grams, B.Sc., B.A.
Environmental Scientist
OPPTS Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5 Land and Chemicals Division Chemicals Management Branch, Toxics Section

77 West Jackson Boulevard (LC-8J)

Chicago, IL 60604

PHONE: (312) 886-7747 FAX: (312) 697-2527 E-MAIL: grams.bradley@epa.gov

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# Registration\_Dec 1-3 2009 GLBTS Mtgs.xls

Laurence Libelo/DC/USEPA/US 03/31/2010 11:24 AM To kenneth.a.bowers

CC

bcc

Subject AFFF info

Ken,

Here is some information on AFFF at Tyndall AFB and Fire Training sites in general. There is not too much out there but these will give you a good idea of the issues.

McDiarmid MA, Lees PS, Agnew J, Midzenski M, Duffy R. Occurrence and persistence of perfluorooctanesulfonate and other perfluorinated surfactants in groundwater at a fire-training area at Wurtsmith Air Force Base, Michigan, USA. J Environ Monit. 2003 Apr;5(2):341-5.

Moody CA, Hebert GN, Strauss SH, Field JA. Occurrence and persistence of perfluorooctanesulfonate and other perfluorinated urfactants in groundwater at a fire-training area at Wurtsmith Air Force Base, Michigan, USA J Environ Monit. 2003 Apr;5(2):341-5.





AFFF GW.pdf llavine et al.pdf

Here is link to the SRDUP call for proposals that is out right now on PFCs from AFFF at fire training sites. They estimate that there are about 600 of these sites that need that need remediation.

http://www.serdp.org/funding/Core-Sons.cfm

Please feel free to call if you need more information.

Laurence

\_\_\_\_\_\_

\_\_\_\_\_

E. Laurence Libelo, Ph.D., PG Senior Environmental Engineer Exposure Assessment Branch Office of Pollution Prevention and Toxics U.S. Environmental Protection Agency OPPTS/OPPT/EETD/EAB 202-564-8553 FAX 202-546-8671 Laurence Libelo/DC/USEPA/US To Kerry.Dearfield

03/04/2010 02:12 PM

СС bcc

Subject Fw: latest version

---- Forwarded by Laurence Libelo/DC/USEPA/US on 03/04/2010 02:13 PM -----

From: Christopher Lau/RTP/USEPA/US

Andrew Lindstrom/RTP/USEPA/US@EPA, Barbara Abbott/RTP/USEPA/US@EPA, Carolyn To:

Acheson/CI/USEPA/US@EPA, Cathy Fehrenbacher/DC/USEPA/US@EPA, Christopher

Lau/RTP/USEPA/US@EPA, Doug Wolf/RTP/USEPA/US@EPA, Elaine Francis/DC/USEPA/US@EPA, Jennifer Seed/DC/USEPA/US@EPA, John Rogers/RTP/USEPA/US@EPA, Joyce Donohue/DC/USEPA/US@EPA, Kerry Hamilton/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Marc

Mills/CI/USEPA/US@EPA, Ronald Hunter/DC/USEPA/US@EPA, Ross

Highsmith/RTP/USEPA/US@EPA

03/03/2010 03:36 PM Date:

latest version Subject:

## Dear All:

Please take one last look at the latest version of Background and Agenda and let me know of your thoughts.





Background web 3-3.doc PFAA Days III Agenda web 3-3.doc

The session leaders have been hard at work to confirm the speaker availability, and I think we are in pretty good shape (except the TBA).

The Communication Team at NHEERL has also made substantial strides to set up the registration website, with the attached background and agenda posted. I should be able to beta-test it on Friday and am planning to send out a mass mailing next week. If there are any groups and/or individuals that you wish to notify, please let me know.

Chris

Laurence Libelo/DC/USEPA/US 03/04/2010 03:58 PM

To Kerry.Dearfield

cc Andrew Lindstrom, Mark Strynar, John Washington

bcc

Subject Fw: Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and WWTPs Results

Kerry,

Here is the PFOA and PFOS data fo rturkeys from the Dalton sprayfield

# Does anyone eat turkey liver?

#### Laurence

----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/04/2010 03:57 PM -----

From: Michael Hom/R4/USEPA/US

Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Lee To:

Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca Fauver/R4/USEPA/US@EPA, WilliamT Jones/R4/USEPA/US@EPA, William Bush/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Stacey Haire/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Frank

Ney/R4/USEPA/US@EPA

03/04/2010 03:47 PM Date:

Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and Subject:

WWTPs Results

#### FYI. Latest results.

Dalton 308 Response Feb 24 2010 Monthly Progress Report and LAS and Wildlife Data.PDF



Dalton 308 Response Feb 24 2010 Attachment B 2 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment B 1 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment F WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment E WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment D Wild Turkey Serum.PDF



Dalton 308 Response Feb 24 2010 Attachment C Wild Turkey Muscle and Liver.PDF



Dalton 308 Response Feb 24 2010 Attachment A LAS Monitoring Well and Surface Water.PDF

Laurence Libelo/DC/USEPA/US

To Kimberly Harris

05/19/2010 03:52 PM

СС bcc

Subject Fw: Analytes to look for - different chain lengths

Kim,

FYI

## ----- Forwarded by Laurence Libelo/DC/USEPA/US on 05/19/2010 03:52 PM -----

From: Laurence Libelo/DC/USEPA/US
To: Ryan Bahr/R5/USEPA/US@EPA

Cc: Benjamin Bahk/DC/USEPA/US@EPA, Jacqueline Clark/R5/USEPA/US@EPA, KarenD

Johnson/R3/USEPA/US@EPA, Leslie Kirby-Miles/R5/USEPA/US@EPA, Paul Ruesch/R5/USEPA/US@EPA, Roger Reinhart/R3/USEPA/US@EPA, Thomas

Poy/R5/USEPA/US@EPA, Lori Kier/R3/USEPA/US@EPA

Date: 05/19/2010 02:21 PM

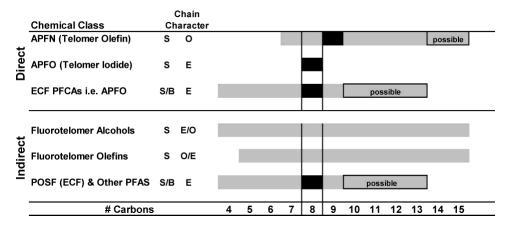
Subject: Analytes to look for - different chain lengths

# Ryan,

Here is a publication by DuPont that includes a discussion of the different chain lengths that are in the C8 products as they are manufactured.



"...Historically, commercial PFCA products were mixtures containing linear eight- or ninecarbon PFCAs as their major component. Depending upon the synthesis route and raw material, the PFCA products also contained homologues ranging from four to thirteen carbons with as much as 30 wt % branched PFCAs present. An overview of the chain length composition, predominance of even (E) or odd (O) and straight (S) or branched (B) character from PFCA manufacture is shown in Figure 2.



Laurence Libelo/DC/USEPA/US

03/17/2010 03:33 PM

To laller

CC

bcc

Subject Fw: EPA/OSWER RfD for PFOA and PFOS

OSWER has finalized the RfD Tox Value Memo for PFOA and PFOS. It is attached below.



Final PFOA PFOS RfD memo 10-28-09.pdf

Laurence Libelo/DC/USEPA/US

01/14/2010 10:47 AM

To Lee Thomas

СС

bcc

Subject Fw: AFFF paper

Lee,

Here is some information on AFFF at Tyndal and Fire Training sites in general. Lavine et al. is our paper from Tyndall. Audrey Lavine is now the national Program Director for Water in ORD.

McDiarmid MA, Lees PS, Agnew J, Midzenski M, Duffy R. Occurrence and persistence of perfluorooctanesulfonate and other perfluorinated surfactants in groundwater at a fire-training area at Wurtsmith Air Force Base, Michigan, USA. J Environ Monit. 2003 Apr;5(2):341-5.

Moody CA, Hebert GN, Strauss SH, Field JA. Occurrence and persistence of perfluorooctanesulfonate and other perfluorinated urfactants in groundwater at a fire-training area at Wurtsmith Air Force Base, Michigan, USA J Environ Monit. 2003 Apr;5(2):341-5.



Also,

Here is link to the DoD call for proposals that is out right now on PFCs from AFFF at fire training sites. They estimate that there are about 600 of these sites that need that need remediation.

http://www.serdp.org/funding/Core-Sons.cfm

# 3. Background – Statement of the Problem

Perfluoroalkyl compounds, such as PFOA and PFOS have been used to manufacture a variety of industrial and military products, including (through 2001) PFOS-based fluorochemical surfactants (FCSs) used in AFFF. AFFF is used to extinguish flammable liquid (e.g., hydrocarbon) fires. Military Specification MIL-F-24385F mandates the use of FCSs in AFFF to meet performance requirements. Additional ingredients include organic solvents (i.e., glycol ether), foam stabilizers, and corrosion inhibitors. Over the past several years, manufacturers of FCSs have shifted to a telomerization process to produce FCSs for use in AFFF. While telomer-based FSCs do not contain or break down into PFOS, they may contain trace levels of perfluorocarboxylic acids (e.g., PFOA) as an impurity.

Environmental releases of AFFF have likely occurred from tank and supply line leaks, use of aircraft hanger fire suppression systems, and from fire fighting training activities. Site investigations under the Defense Environmental Restoration Program (DERP) have not typically included analysis for PFCs given their emerging status. However, approximately 600 DERP sites are categorized as Fire/Crash/Training areas and thus have the potential for PFC contamination due to historical use of AFFF.

PFOA and PFOS have attracted increased regulatory scrutiny because of their resistance to degradation, ability to bioaccumulate, and growing evidence of toxicity in animal studies. The U.S. Environmental Protection Agency (USEPA) recently published Provisional Health Advisory (PHA) values of 0.4  $\mu$ g/L for PFOA and 0.2  $\mu$ g/L for PFOS in drinking water. Additionally, the Agency for Toxic Substances and Disease Registry recently released a draft toxicological profile on perfluoroalkyls for public comment. Several state regulatory agencies have moved forward to establish action levels and guidelines for PFOA and PFOS. Minnesota established a health risk level (HRL) of 0.3  $\mu$ g/L in drinking water for PFOA and PFOS. New Jersey established a drinking water guidance value of 0.04  $\mu$ g/L for PFOA. These levels are several orders of magnitude lower than concentrations of PFOA and PFOS observed in groundwater at historical fire training areas.

Laurence Libelo/DC/USEPA/US 03/19/2010 03:16 PM

To Lee Thomas

CC

bcc

Subject PFCs in Ohio River and other rivers.

Lee,

I did a quick survey and found that there about 2 million people who get their water from the Ohio river. When the ORSANCO PFC data is released there may be exceedances of the current Health Advisory levels for parts of the river. Some of the higher levels seem to be close to water intakes. I am a bit concerned that people are drinking this contaminated water but don't k now what we can do about it at this point. Until we get the final results we can't do much other then be ready to respond I think.

You have probably seen these already but here is the data from the other 2 large scale river studies in the US.

This manuscript contains data for the Mississippi River from Shoji, Andy and Mark in RTP. This paper has been accepted and will be published soon. None of these measurements exceed the Provisional Health Advisory (PHA) levels for PFOA and PFOS but they come close, the other PFCs are also pretty high. If the new OW/OPPT levels come out in December lower by a factor of 2 then some locations on the Mississippi will exceed.





Draft\_UMRBA\_ver9.doc Draft\_UMRBA\_supinfo\_ver9.doc

Here also is their Cape Fear River study. Again the levels they measured don't exceed the HA levels but will if the new levels are not too much lower.



cape fear study.pdf

Depending on the levels in the new HA that OW says will be out in December the Mississippi and other rivers may have widespread exceedance. I think that as they get closer to releasing their new HAs we need to be thinking about how to deal with this. Since most water systems don't have good GAC treatment I think we will have many that are distributing water with levels that exceed the levels on the HAs. We need to be ready to respond when we have the endpoints.

#### Laurence

------

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671
Laurence

Laurence Libelo/DC/USEPA/US

03/17/2010 11:34 AM

To Mark Strynar, Andrew Lindstrom

CC

bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

Hi Guys,

Do you know anyone who can run longer PFCs? The ADREM guys are looking for a lab that can do what

they are including in their permit. Any suggestions.

## Thanks.

## ----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/17/2010 11:05 AM -----

From: Sean Ireland/R4/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 03/10/2010 05:53 PM

Subject: Fw: Morgan County Landfill Leachate SID Permit Parameters

# ---- Forwarded by Sean Ireland/R4/USEPA/US on 03/10/2010 05:52 PM -----

From: Sean Ireland/R4/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA

Cc: SRamsey@adem.state.al.us

Date: 03/01/2010 10:41 AM

Subject: Fw: Morgan County Landfill Leachate SID Permit Parameters

Laurence, ADEM is trying to determine who is able to analyze these remaining PFC parameters. Please response to Scott directly, and 'cc' me, since today is my only day in the office until next Monday. Thanks!

Sean Ireland Environmental Engineer Clean Water Enforcement Branch U.S. EPA, Region 4 (404) 562-9776 (404) 562-9729 fax

---- Forwarded by Sean Ireland/R4/USEPA/US on 03/01/2010 10:38 AM -----

From: "Ramsey, Samuel" <SRamsey@adem.state.al.us>

To: Sean Ireland/R4/USEPA/US@EPA

Date: 02/26/2010 10:17 AM

Subject: FW: Morgan County Landfill Leachate SID Permit Parameters

Sean do you know anything about the sampling methods for 9:2 s Florotelomer Alcohol and 11:2 s Florotelomer and the c15-c18 PFCA

### Thanks

Scott Ramsey Industrial/Mining Section NPDES Permit Branch Water Division (334) 274-4220

From: Dan Cooper [mailto:dcooper@ttlusa.com] Sent: Thursday, February 25, 2010 10:21 AM

**To:** Ramsey, Samuel; Dean, Glenda **Cc:** Patrick Gupton; Sheryle Reeves

Subject: Morgan County Landfill Leachate SID Permit Parameters

Hi Scott: Thanks for your willingness today to take a look at the pages attached to this e-mail regarding the monitoring parameters for certain compounds. As we briefly discussed, our conversations with MPI have indicated that no analytical procedure could be found for the last four acids listed on page 1 for DSM001S. We also believe that the procedures cited on page 1 a as 9:2 s Florotelomer Alcohol 2/ and 11:2 s Florotelomer Alcohol 2/ may have been listed in error for 7:2 and 6:2 respectively. We are still researching the analytical procedures for Alpha Terpinoel and Benzoic Acid for the same discharge point listed on page 1 a. We really appreciate your review of this information; so we can make certain of the definitive reporting requirements. As you know, Sheryle Reeves and I have a meeting scheduled with Glenda, Dale and Eric on Monday, March 1 regarding another matter and will be available to discuss this in more detail if you find it beneficial. In the meantime, please feel free to call me if you have questions or are able to sort out the correct procedure citations. We will continue our investigation of the guidelines and procedures and will let you know if we find anything pertinent to resolution.

Sincerely, Dan

Dan Cooper, P.E.
Branch Manager
TTL, Inc.
4154 Lomac Street
Montgomery, Alabama 36106
ph (334) 244-0766
fax (334) 244-6668
www.ttlusa.com

Laurence Libelo/DC/USEPA/US 04/16/2010 11:55 AM To Michael Hom

CC

bcc

Subject Fw: et-fosaa degradation

Mike,

DOC022510.pdf

Here is some info on the FOSAA and telomer degradation pathways and rates

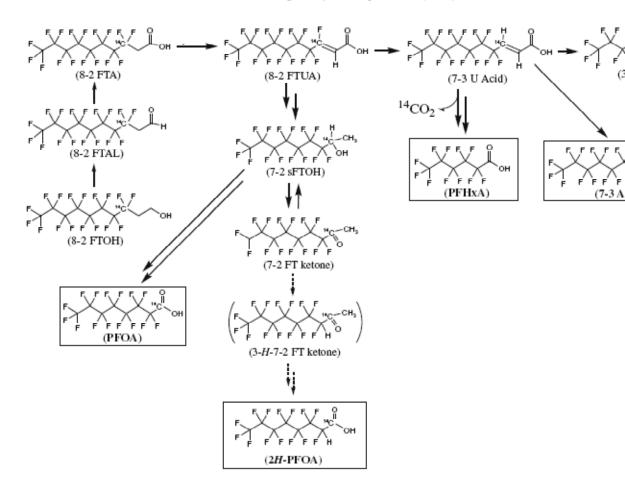
Here is page from a 3M presentation that shows a degradation pathway form Et Fose to PFOA and PFOS through FOSA.



Here is a recent DuPont pub that shows a telomer alcohol degradation chain.



N. Wang et al./Chemosphere xxx (2009) xxx-xxx



# Subject a few more refs









biodeg.pdf Mabury.EPA\_Talk.ppt PaPs biodeg - Holly lee paper.pdf polyurethane bioged review.pdf

Laurence Libelo/DC/USEPA/US To Misa Sugihara

04/14/2010 03:41 PM

СС bcc

Subject Fw: Pablo's SETAC poster on polymer biodeg

A study from Univ. of Toranto



Pablo Tseng - fluoropolymer poster.pdf

Laurence Libelo/DC/USEPA/US

04/14/2010 03:38 PM

To Misa Sugihara

СС

bcc

Subject Fw: PDF version of Sanitized 3M biodeg study

Here is a report from 3M on biodegradation of a fluoropolymer . It is available from the public PMN office here in DC but not easily accessible otherwise.

Laurence



Laurence Libelo/DC/USEPA/US To Misa Sugihara

CC

bcc

Subject Fw: Urethane polymer degradation article

04/14/2010 04:02 PM

#### ----- Forwarded by Laurence Libelo/DC/USEPA/US on 04/14/2010 04:02 PM -----

From: Mark H Russell < Mark.H.Russell@usa.dupont.com>

To: Laurence Libelo/DC/USEPA/US@EPA

Cc: Robert C Buck <Robert.C.Buck@USA.dupont.com>

Date: 10/23/2009 12:16 PM

Subject: Urethane polymer degradation article

#### Laurence

Attached is a copy of the unedited manuscript for our current paper on the degradation of a fluorotelomer-based urethane polymer. The final version will include several minor typographical corrections and should appear on-line soon. I am also attaching the Supplementary Material which will be posted with the final version.

From my perspective, these results provide additional validation to the acrylate polymer results we previously published since the same mathematical model was used for both studies.

In the acrylate study, the polymer half-life was estimated to be 1200-1700 years and this result was complicated by the presence of residuals. In the urethane study, the residual content was extremely low (i.e. essentially zero) and model could be simplified to fit the essentially linear results observed for formation of PFO with time.

For the urethane polymer, the degradation half-life varied between 28-241 years and the "effective polymer half-life" (meaning the rate at which PFO is formed) was four times this number (reflecting the ~25% yield of PFO from 8-2 FTOH precursor chains) and the resulting effective half-life was 114 to 964 years. When this rate was combined with the historical production data, fluorotelomer-based urethane polymers contributed less than 1% of the global historical PFO in the environment, as summarized in Figure 3.

Please let me know if you have any questions. We would be happy to meet with you and your colleagues to discuss our results.

Hope you enjoy your weekend!

Mark

Mark H. Russell DuPont Haskell Global Centers for Health and Environmental Sciences

Office: Haskell 214 Phone: (302) 366-6020 Fax: (302) 351-6958

Email: mark.h.russell@usa.dupont.com

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urethane polymer degn - unedited manuscript.pdf 80 ct09 Russell urethane biodeg Sl.doc

Laurence Libelo/DC/USEPA/US 04/14/2010 03:37 PM To Misa Sugihara

СС

bcc

Subject photodeg info for of fluoropolymers

Misa,

I an sending you the polymer degradation studies. Here is info on polymer nhotolysis that 3M presented at the Society of Environmental Toxicology and Chemistry meeting in November, 2008.





set.ppt | Setac Soil Photolysis 2.ppt

Laurence

Laurence Libelo/DC/USEPA/US

04/14/2010 03:46 PM

To Misa Sugihara

СС

bcc

Subject possible Biodegradation of Perfluorinated Compounds [Voogt

et. al]



Biodegradation of Perfluorinated Compounds\_Voogt.pdf

Laurence Libelo/DC/USEPA/US

03/18/2010 11:26 AM

To rgrace

СС

bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671



Laurence Libelo/DC/USEPA/US

03/09/2010 05:13 PM

To Rick Sugatt

cc Katherine Sleasman, Toni Krasnic

bcc

Rick,

From what we have seen fire training sites are pretty contaminated perfluoro chemicals for AFFF for many years. The argument that they will not be there based on solubility is wrong. In less contaminated sites the soil dissipation half-life seems to be several decades. Where you have AFFF there are a lot of perfluo chemicals that degrade down to PFOA and PFOS in addition to the PFOA and PFOS themselves. Many of these precursors are not water soluble and sorb to soil strongly. This results in PFOA and PFOS being produced in the soil and leaching to groundwater for a long time. So in addition to what was in the AFFF initially the PFOA and PFOS in the soil and groundwater will continue to be released until the precursors are removed.

AFFF contains a large number of PFCs besides PFOA and PFOS. Fire training sites always have a lot of other PFCs, many of which are know to biodegrade to PFOA and PFOS. They always contain carboxylic acids and sulfonates with longer and shorter chain lengths also.

Right now the only end points for drinking water and soil exposure are for PFOA and PFOS but OW and OPPT are working on cumulative tox assessments for the other chain lengths. Sometime within the year they are expected to come out with some sort of limits on the others. When analyzing for PFOA and PFOS the others come out in the same GC/MS/MS runs so it is a good idea to quantify them also.

I will attach a couple of papers the show what is in AFFF and what has been found at fire training sites.

There is not a standard method for analysis of PFCs yet. EPA Method SW-846 / Methods 3535A/832 are close but will not give good results without some modifications. For analysis I strongly recommend that they send the samples to one of the 5 or 6 labs that have shown they can actual run PFCs. Most labs will not be able to. We have seen that even very good analytical labs with very competent chemists will take 6-9 months to get set up and running for PFC analysis. Based on the data we review I would suggest that they go to one of the top 4.

MPI, State College PA Test America, Denver AXYS, Victoria, BC Wildlife International, Easton MD

ABC labs and a couple of others are also doing these analytes now but these have the longest experience and produce reliable data.

To get a good idea of the world of PFCs look at this publication form Wellington labs. This is the company that sells most of the standards that are used to analyze PFCs. Their descriptions and analytical info is pretty good.





Please feel free to call me or have the Navy folks call if they need more information.

## Laurence

\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671

Toni Krasnic Hey Laurence, Can you please refer Ri... 03/09/2010 04:07:31 PM

From: Toni Krasnic/DC/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA
Cc: Katherine Sleasman/DC/USEPA/US@EPA

Date: 03/09/2010 04:07 PM

Subject: Fw: EPA method for analysis of PFOS and PFOA in water

# Hey Laurence,

Can you please refer Rick to the appropriate contact and/or lit references? Thanks.

## tk

#### 564.0984

---- Forwarded by Toni Krasnic/DC/USEPA/US on 03/09/2010 04:05 PM -----

From: Rick Sugatt/R1/USEPA/US
To: krasnic.toni@epa.gov
Cc: sleasman.katherine@epa.gov

Date: 03/09/2010 03:56 PM

Subject: EPA method for analysis of PFOS and PFOA in water

I am a Superfund risk assessor in EPA Region I New England. I got your names as HQ contacts from the EPA PFOS web site. Navy is proposing to use EPA Method SW-846 Methods 3535A/8321 to measure PFOS and PFOA in groundwater taken from monitoring wells downgradient from a fire fighting training area and a hangar with known usage and spills of Aqueous Film Forming Foam (AFFF) at the Naval Air Station South Weymouth, Weymouth, MA Superfund site. Could you please let me know if this is the best EPA-approved analytical method for analysis of PFOS and PFOA in groundwater? Since these spills and groundwater migrated to a nearby stream years ago, I would also be interested in your recommendations for methods to analyze these chemicals in fish tissue, sediment and soils. Navy asserts that, since all base operations ceased in 1996, enough time has passed that the perfluorinated chemicals, which are very soluble, have likely been flushed from the surface water and sediments. Thank you for any help you can provide.

Richard H. Sugatt U.S.EPA New England 5 Post Office Square, Suite 100 OSRR07-2 Boston, MA 02109-3912 Voice: 617-918-1415 email: sugatt.rick@epa.gov

Laurence Libelo/DC/USEPA/US To Rose Allison

CC

06/03/2010 12:13 PM

bcc

Subject Washington methods

Rose,

I never got Warren's email. Can you please forward these on to him?

Thanks.

Laurence

\_\_\_\_\_\_

========

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671





100303SOPPMB59-1ExhaustiveExtractionOfPFAAsFromSoil-etc-WithlonPairingCleanup.doc EllingtonEtAl2009.pdf

Laurence Libelo/DC/USEPA/US

05/19/2010 02:21 PM

To Ryan Bahr

cc Benjamin Bahk, Jacqueline Clark, KarenD Johnson, Leslie Kirby-Miles, Paul Ruesch, Roger Reinhart, Thomas Poy, Lori Kier

bcc Bradley Grams

Subject Analytes to look for - different chain lengths

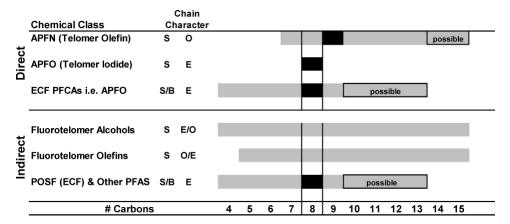
Ryan,

Here is a publication by DuPont that includes a discussion of the different chain lengths that are in the C8 products as they are manufactured.



16433330.pdf

"...Historically, commercial PFCA products were mixtures containing linear eight- or ninecarbon PFCAs as their major component. Depending upon the synthesis route and raw material, the PFCA products also contained homologues ranging from four to thirteen carbons with as much as 30 wt % branched PFCAs present. An overview of the chain length composition, predominance of even (E) or odd (O) and straight (S) or branched (B) character from PFCA manufacture is shown in Figure 2.



\_\_\_\_\_

E. Laurence L belo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671

Laurence Libelo/DC/USEPA/US 03/04/2010 03:08 PM To Sara Pollack

CC

bcc

Subject AFFF paper and PPT

Sara,

Here is the paper on eco effects following a AFFF release.



etobicoke creek eco effects of AFFF.pdf

Also after looking at this PPT do you think they might have an environmental contamination issue?



## Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671

Laurence Libelo/DC/USEPA/US

12/17/2009 04:11 PM

To Sean Ireland

СС

bcc

Subject pfc ppt



PFCs background 12-09.ppt

Laurence Libelo/DC/USEPA/US

01/22/2010 02:26 PM

To Sean Ireland

СС

bcc

Subject PFCs in leachate paper

Sean,

In case you have not see it already -



PFCs in leachate - Busch 2010.pdf

Laurence Libelo/DC/USEPA/US

12/14/2009 05:11 PM

To Sean Ireland

СС

bcc

Subject Re: Fw: Comments Presented at EPA Region IV Public

# Here you go.



Stock et al 2004 - air PFCs.pdf

Sean Ireland Could you re-attach the "Stock et al 200... 12/14/2009 04:27:55 PM

From: Sean Ireland/R4/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 12/14/2009 04:27 PM

Subject: Re: Fw: Comments Presented at EPA Region IV Public Meeting on Perfluorochemicals in Decatur,

AL Sludge

Could you re-attach the "Stock et al 2004 - air PFCs.pdf" document for me? I'd like to take a look. Thanks.

Sean Ireland Environmental Engineer Clean Water Enforcement Branch U.S. EPA, Region 4 (404) 562-9776 (404) 562-9729 fax

NOTICE: ENFORCEMENT CONFIDENTIAL DO NOT RELEASE UNDER FOIA

This message is intended exclusively for the individual(s) of entity(s) to which it is addressed. This communication may contain information that is proprietary, privileged, or confidential or otherwise legally exempt from disclosure. If you are not the named addressee, you are not authorized to read, print, retain, copy, or disseminate this message or any part of it. If you have received this message in error, please notify the sender immediately by email and delete all copies of the message.

Gail Mitchell	Thanks Laurence. Very helpful as alwa	12/11/2009 01:32:27 PM
Laurence Libelo	Hi Gail, The DuPont Athens GA plant w	12/09/2009 04:17:40 PM
Gail Mitchell	Laurence - I'm having to respond to this	12/09/2009 12:43:03 PM

Laurence Libelo/DC/USEPA/US 01/19/2010 03:09 PM To Shoji Nakayama

CC

bcc

Subject AFFF document

Shoji, I came across this in our docket.

Laurence



Laurence Libelo/DC/USEPA/US To Shoji Nakayama

02/16/2010 01:33 PM

cc bcc

Subject Fw: PFCs in MILORGANITE

----- Forwarded by Laurence Libelo/DC/USEPA/US on 02/16/2010 01:33 PM -----

From: Laurence Libelo/DC/USEPA/US

To: Cathy Fehrenbacher/DC/USEPA/US@EPA

Cc: Toni Krasnic/DC/USEPA/US@EPA, Mark Strynar/RTP/USEPA/US@EPA, John

Washington/ATH/USEPA/US@EPA, Andrew Lindstrom/RTP/USEPA/US@EPA, Ross

Highsmith/RTP/USEPA/US@EPA, Rick Stevens/DC/USEPA/US@EPA, Jan Pickrel/DC/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Michael

Hom/R4/USEPA/US@EPA, Mark Garvey/DC/USEPA/US@EPA, Kay Austin/DC/USEPA/US@EPA

Date: 02/16/2010 01:25 PM Subject: PFCs in MILORGANITE

# Cathy,

Mike Hom in R4 forwarded on results of analysis from the Milwaukee WWTP commercial sludge product MILORGANITE. In addition to the usual mix of priority pollutants and new stuff like PBDEs they looked for PFCs. This is becoming more common as a results of Decatur and we can expect other biosolids to be analyzed across the country.

They found alot of PFCs including PFOS > 100 ppb and PFOA and shorter chain stuff at > 10 ppb. (see page 121). This is in line with what has been reported from other treated WWTP sludges, and is a pretty good example of what we should expect in any biosolids.

# Pen Fluorina Ted Chemicals EXECUTIVE SUMMARY - Detection Highlights Decorption The New est POP"

AA/,					
1,		REPORTING			ANALYTICAL
•	PARAMETER	RESULT	LIMIT	UNITS	METHOD
901347	4/979 06/26/09 14:30 001				
301342	4/9/9 06/26/09 14:30 OUL				
	Perfluoroundecanoic acid (PFUn	5.B	5.4	ug/kg	DEN -LC-0012
	Perfluorododecanoic acid (PFDo	13	5.4	ug/kg	DEN -LC-0012
্ণ	Perfluoropentanoic acid (PFPA)	1.9	2.1	ug/kg	DEN -LC-0012
~0,	Perfluorohexanoic acid (PFHxA)	23	2.1	ug/kg	DEN -LC-0012
, V	Perfluoronomanoic acid (PFNA)	3.1	2.1	ug/kg ·	DEN -LC-0012
The	Perfluorodecanoic acid (PFDA)	1.3	2.1	ug/kg	DEN -LC-0012
, , , , ,	Perfluorodecane sulfonate (PFD	14	2.1	ug/kg	DEN -LC-0012
4. h	Perfluorooctanesulfonate	100 -	2.1	ug/kg	DEN -LC-0012
٧.	Perfluorooctanoic Acid	22	5.4	ug/kg	DEN -LC-0012
./	Percent Moisture	6.7	0.10	8	ASTM D 2216-90
901367	8/979 01/03/09 002				
	Perfluoroundecanoic acid (PFUn	7.7	5.3	ug/kg	DEN -LC-0012
			5.3	ug/kg ug/kg	DEN -LC-0012
Logo Posite	Perfluoropentanoic acid (PFPA)		2.1	ug/kg	DEN -LC-0012
V0 1.	Perfluoropentanoic acid (PFHXA)				DEN -LC-0012 DEN -LC-0012
TO Per	Perfluoronexanoic acid (PPHKA)		2.1	ug/kg	
7 10	Perfluoroheptanoic acid (PFMpA		2.1	ug/kg	DEN -LC-0012
. ov**Y	Perfluoronomanoic acid (PFNA)	5.3	2.1	ug/kg	DEN -LC-0012
10.	-	16	2.1	ug/kg	DEN -LC-0012
	Perfluorodecane sulfonate (PFD		2.1	ug/kg	DEN -LC-001,2
	Perfluorocctanesulfonate	110 -	2.1	ug/kg	DEN -LC-0012
	Perfluoroctanoic Acid	16 —	5.3	ug/kg	DEN -LC-0012
	Percent Moisture	6.0	0.10	*	ASTM D 2216-90
901267	3/979 01/05/08 003				
301367	3/3/3 01/03/06 003				
	Perfluoroundecanoic acid (PFUn	5.0.	5.3	ug/kg	DEN '-LC-0012
	Perfluorododecanoic acid (PFDo	6.5	5.3	ug/kg	DEN -LC-0012
4	Perfluoropentanoic acid (PPPA)	11	2.1	ug/kg	DEN -LC-0012
9.1	Perfluorohexanoic acid (PFHxA)	8.0	2.1	ug/kg	DEN -LC-0012
. o v .41	Perfluorononanoic acid (PFNA)	4.9	2.1	ug/kg	DEN -LC-0012
L" - 0311	Perfluorodecanoic acid (PFDA)	9.4	2.1	ug/kg	DEN -LC-0012
()4	Perfluorodecane sulfonate (PFD	11	2.1	ug/kg	DEN -LC-0012
Look positi	Perfluorocctanesulfonate	120 -	2.1	ug/kg	DEN -LC-0012
o V	Perfluoroctanoic Acid	9.3 -	5.3	ug/kg	DEN -LC-0012

This stuff is widely sold and I think it represents a wide spread source of PFC contamination environmentally and to people who use it. The levels they report are below the OSWER direct contact limits but we probably should be concerned about this stuff being sold everywhere. This is a consumer

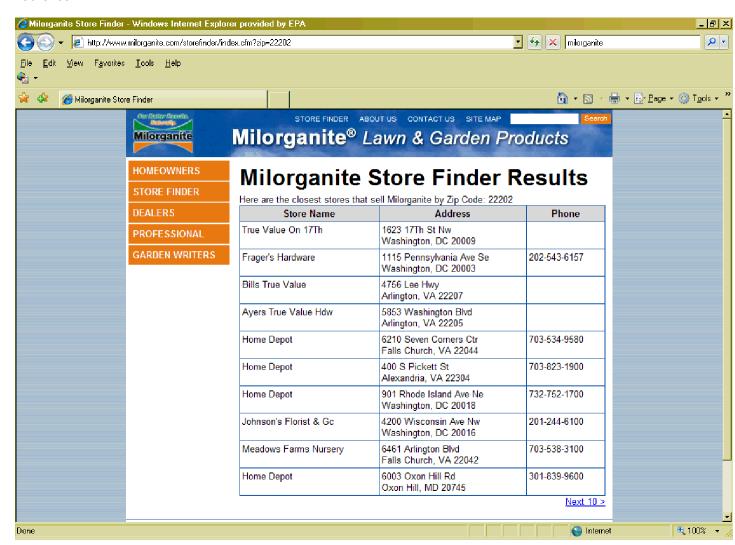
0.10

ASTM D 2216-90

Percent Moisture

product rather then a limited biosolids application so it is much more widespread then what we have been dealing with in Decatur or Dalton. Here, for example, are the local stores near my house where it is sold.

#### Laurence



---- Forwarded by Laurence Libelo/DC/USEPA/US on 02/16/2010 01:02 PM -----

From: Michael Hom/R4/USEPA/US

To: Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Glenn

Adams/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Lee Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca

Fauver/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Ed Sims/R4/USEPA/US@EPA,

Rick Stevens/DC/USEPA/US@EPA, Robert Bastian/DC/USEPA/US@EPA, Mark

Meckes/CI/USEPA/US@EPA, Laura Boczek/CI/USEPA/US@EPA

Date: 02/10/2010 02:54 PM

Subject: Fw: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe

Acrobat Professional

# ---- Forwarded by Michael Hom/R4/USEPA/US on 02/10/2010 02:40 PM -----

From: "Smart, Daphne Y" <DDY@adem.state.al.us>

To: Michael Hom/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA

Cc: "Dean, Glenda" <GLD@adem.state.al.us>, "Ramsey, Samuel" <SRamsey@adem.state.al.us>

Date: 02/10/2010 02:33 PM

Subject: FW: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe

Acrobat Professional

ADEM received the attached biosolids report, which includes PFC testing results. We wanted to ensure that EPA was also aware of this report.

The letter was addressed to the previous Biosolids contact for the State of GA. Mike – as discussed by phone please forward to the new GA contact.

If you need additional information, please do not hesitate to contact me.

Thank you,

Daphne Y. Smart, Chief Municipal Permit Section Water Division

(334) 271-7801



Mission: Assure for all citizens of the state a safe, healthful and productive environment

From: Caldwell, Mattie

Sent: Thursday, February 04, 2010 2:06 PM

To: Smart, Daphne Y

Subject: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe Acrobat

Professional



XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf

Laurence Libelo/DC/USEPA/US 03/02/2010 12:26 PM To Toni Krasnic

СС

bcc

Subject Fw: Little Hocking Raw Water

Toni, do you know if this is in the docket? I can't find it. I wan to refer to it and am looking for a Docet number.

Thanks.



2-16-10 LHWA APFO and PFOA Results.pdf

Laurence Libelo/DC/USEPA/US To Toni Krasnic

02/24/2010 04:48 PM

СС

bcc

Subject Fw: point of use water treatment report

Toni, in case you have not seen this here is the Minn report on point of use treatment devices for PFCs.





water treatment - point of use device report summary.pdf water treatment - point of use device report.pdf

Laurence

Laurence Libelo/DC/USEPA/US 03/31/2010 11:41 AM To Toni Krasnic

CC

bcc

Subject Re: About that study that you mentioned on 6-2 alcohol leading to a C7 PFC





ellis et al 2004.pdf FTOH metabolism'.pdf

Toni Krasnic Hey Laurence, Do you have a copy of t... 03/30/2010 02:28:49 PM

From: Toni Krasnic/DC/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 03/30/2010 02:28 PM

Subject: About that study that you mentioned on 6-2 alcohol leading to a C7 PFC

Hey Laurence,

Do you have a copy of that Mabury study that you talked about after out meeting with DuPont, which showed transformation of 6-2 alcohol into a C7 PFC acid?

Thanks.

tk 564.0984

> Laurence Libelo/DC/USEPA/US

To Toni Krasnic

cc bcc

03/30/2010 07:06 PM

Subject Re: Fw: PFOA in Ohio River

Toni,

Here is the data from the Cincinnati Water Works that is referenced in the EPA letter. As you said this letter was part of the MOU process and is our response to DuPont's response to the MOU Peer Consultation Report. In the EPA letter we agreed with the Peer Review Panel that more monitoring was needed to determine the exposures to PFOA downstream from the Parkersburg plant and mentioned that additional data we have received, including the Cincinnati data, shows contamination expending well beyond the limit of the earlier DuPont sampling.

The Peer consultation report, DuPont's response and the EPA letter should be on the Peer Consultation Panel site but are not. They are not in our dockets either. I asked Gerry to check on this. We have been getting calls about it and need to follow up and make sure it gets posted.

The Cincinnati Water Works Data shows that PFOA was up to about 0.1 ppb in the river water used as a drinking water source in 2005. It has dropped to about 0.01-0.02 ppb over time. Their data show that PFOA was below the Provisional Health Advisory level (0.4 ppb) but that post-treatment levels are in the 0.01-0.2 ppb range. In 2009 the raw Ohio River water was 0.011 ppb and the post carbon filtration levels were about 0.01. This suggests that the GAC system effective at removing low levels.

Some of the additional data suggest that PFOA from Parkersburg is detectable many miles down stream. It also suggests that there are other sources in the Ohio River. Some of these appear to be fairly large. The Ohio River Valley Sanitary Commission, working with ORD Cincinnati, is about to release a report on PFCs in the Ohio River. They will report finding elevated PFCs - up to several ppb PFOS and others PFCs at several locations along the river and that most places have lower levels (0.10-0.30). This data suggest that Parkersburg may be the source of much of the low level contamination but that several places in KY seem to be big sources with levels > 1ppb PFOS.

I have seen preliminary data form this study but not the draft report yet. Others including industry and utilities have. ORSANCO told me they hope to have it out within weeks.

The good news is that Cincinnati has a really good GAC system and that their finished water is below the Provisional Health Advisory level.

The bad news is that most of the water systems in OH, WV and KY don't have good GAC, and that the shorter chain stuff is not efficiently removed by GAC.

# ----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/08/2010 06:29 PM -----

From: "Metz, Debbie" < Debbie. Metz@gcww.cincinnati-oh.gov>

To: Laurence Libelo/DC/USEPA/US@EPA

Date: 03/08/2010 05:01 PM Subject: RE: Perfluorochemical data

Attached is our table. Sorry for the delay. Reconstructing the GAC run days took a little while.

----Original Message----

From: Libelo.Laurence@epamail.epa.gov [mailto:Libelo.Laurence@epamail.epa.gov] Sent: Tuesday, March 02, 2010 1:39 PM

To: Metz, Debbie

Subject: RE: Perfluorochemical data



Toni Krasnic Hi Priscilla, The letter is attached. 03/30/2010 01:45:37 PM

From: Toni Krasnic/DC/USEPA/US

To: Priscilla Flattery/DC/USEPA/US@EPA

Cc: Diane Sheridan/DC/USEPA/US@EPA, Jim Willis/DC/USEPA/US@EPA, Dale Kemery/DC/USEPA/US, Cathy Fehrenbacher/DC/USEPA/US@EPA, Laurence

Libelo/DC/USEPA/US@EPA

Date: 03/30/2010 01:45 PM
Subject: Re: Fw: PFOA in Ohio River

Hi Priscilla.

The letter is attached.

Below are some summary bullets. Cathy and/or Laurence (MOU leads) can provide you with more info needed.

- This letter was submitted pursuant to an MOU with DuPont (signed in August 2005). More information about this MOU is available at http://epa.gov/oppt/pfoa/pubs/eca.html#mou.
- Letter includes EPA's comments on DuPont's responses to the Peer Consultation Panel's Input on the Outline of Phase II Work Plan.
- EPA agrees with the Peer Consultation Group (PCG) that additional monitoring data are needed to fully address the "Charge" as defined in the MOU.

Thanks,

tk 564.0984

# [attachment "USEPA Letter to DuPont 3-3-10.pdf" deleted by Laurence Libelo/DC/USEPA/US]

Priscilla Flattery hey, can i get a couple of bullets on this... 03/30/2010 01:21:24 PM

Laurence Libelo/DC/USEPA/US

03/01/2010 10:11 AM

To Toni Krasnic

CC Connie Roberts, Shoji Nakayama, Marc Mills, Bradley Grams, Cathy Fehrenbacher, Kay Austin

hcc

Subject Interesting AFFF PPT

After looking at this PPT do you think they might have an environmental contamination issue? Connie or Brad, do you know who in Region 8 might be working on this?



Laurence Libelo/DC/USEPA/US

03/01/2010 10:08 AM

To Toni Krasnic

cc Connie Roberts, Shoji Nakayama, Mark Miller, Bradley Grams, Cathy Fehrenbacher, Kay Austin

bcc

Subject Interesting AFFF PPT

After looking at this PPT do you think they might have an environmental contamation issue? Connie or Brad, do you know who in Region 8 might be working on this?



rire apririkter rest.pps

Laurence Libelo/DC/USEPA/US

04/12/2010 11:33 AM

To Toni Krasnic

cc David Lynch, John Washington, Andrew Lindstrom, Mark Strynar, Greg Fritz, Shoji Nakayama, Hoon Yoo

bcc

Subject Cornell/Dupont PFOA biodeg paper

They did not see PFOA biodeg. The set up and innoculums they used are interesting.



## **Abstract**

Perfluorooctanoic acid (PFOA) is an industrial chemical that has become disseminated globally in aquatic and and wildlife. Understanding PFOA's biodegradability (susceptibility to microbial metabolic attack) is a crucia informed strategy for predicting and managing this compound's environmental fate. Reasoning that PFOA metabolic defluorination by anaerobic microbial communities, we embarked on a 2-phase experimental approof five different microbial communities (from a municipal waste-water treatment plant, industrial site sediments soils from two fire training areas) to alter PFOA's molecular structure. A series of primarily anaerobic incubation duration) were established with acetate, lactate, ethanol, and/or hydrogen gas as electron donors and PFOA (a and 100 ppb) as the electron acceptor. Cometabolism of PFOA during reductive dechlorination of trichloroether reduction of nitrate, iron, sulfate, and methanogenesis were also examined. Endpoints of potential PFOA transformation products by LC/Orbitrap MS and LC/accurate radioisotor radiotracer study. The strongest indication of PFOA transformation occurred during its potential cometabolism concentration during reductive dechlorination of TCE. Despite an extensive search for transformation product cometabolism of PFOA, we were unable to document any alteration of PFOA's chemical structure. We conclude examined, PFOA is microbiologically inert, hence environmentally persistent.

Laurence Libelo/DC/USEPA/US

03/19/2010 03:28 PM

To Toni Krasnic

cc Gail Mitchell, Lee Thomas, Sean Ireland, Deborah Sherer, John Washington, Jan Pickrel

bcc

Subject new PFC sorbtion to carbon paper - Hansen et al 2010

FYI - in case you have not seen this:



PFC sorption to carbon - Hansen et al 2010.pdf

Laurence Libelo/DC/USEPA/US 03/04/2010 04:37 PM To "Johnston, John"

СС

bcc

Subject Wild Turkey Results

John,

# FYI,

Here are the wild turkey results for Dalton

#### Laurence

----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/04/2010 04:37 PM -----

From: Michael Hom/R4/USEPA/US

Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Lee To:

Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca Fauver/R4/USEPA/US@EPA, WilliamT Jones/R4/USEPA/US@EPA, William Bush/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Stacey Haire/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Frank

Ney/R4/USEPA/US@EPA

Date: 03/04/2010 03:47 PM

Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and Subject:

**WWTPs Results** 

## FYI. Latest results.



Dalton 308 Response Feb 24 2010 Monthly Progress Report and LAS and Wildlife Data.PDF



Dalton 308 Response Feb 24 2010 Attachment D Wild Turkey Serum.PDF



Dalton 308 Response Feb 24 2010 Attachment C Wild Turkey Muscle and Liver.PDF

Laurence To "Johnston, John" Libelo/DC/USEPA/US

04/12/2010 11:06 AM

CC bcc

Subject Soil data Deliberative rough drafts, not for distribution

John,

Here are the soil data from Decatur. Please do not share these with anyone. They are in draft form and the manuscript has not been cleared yet.

If you send me the cow data I can do the crosswalk for you.

## Laurence

\_\_\_\_\_\_ \_\_\_\_\_\_

E. Laurence Libelo, Ph.D. Senior Environmental Engineer **Exposure Assessment Branch** Office of Pollution Prevention and Toxics U.S. Environmental Protection Agency OPPTS/OPPT/EETD/EAB

# 202-564-8553 FAX 202-546-8671





100202PFCsSupportingInformation.pdf 100202FT0HsSupportingInformation.pdf

Laurence Libelo/DC/USEPA/US

04/12/2010 11:38 AM

To "Johnston, John"

cc Kerry.Dearfield

bcc

Subject Fw: UK PFC in food paper

----- Forwarded by Laurence Libelo/DC/USEPA/US on 04/12/2010 11:38 AM -----

From: Andrew Lindstrom/RTP/USEPA/US

To: Shoji Nakayama/RTP/USEPA/US, adelinsk@yahoo.com, Jessica.Reiner@noaa.gov, Laurence

Libelo/DC/USEPA/US@EPA

Date: 04/12/2010 07:47 AM Subject: Fw: UK PFC in food paper

AII,

Check out these papers from Dr. Don Clarke.

Good stuff.

Thanks,

## Andy

----- Forwarded by Andrew Lindstrom/RTP/USEPA/US on 04/12/2010 07:45 AM -----

Cc: Mark Strynar/RTP/USEPA/US@EPA, Peter Egeghy/RTP/USEPA/US@EPA

Date: 04/12/2010 05:00 AM Subject: Re: UK PFC in food paper

That and some others attached

Lindstrom.Andrew@epamail.epa.gov wrote:

```
> Dr. Clarke,
```

> I am very interested in your recent paper concerning PFCs in UK food > samples (specified below).

> I would greatly appreciate it if you would send me a PDF version of this > paper.

```
> Thank you very much,
> Andy
> Andrew B. Lindstrom, Ph.D.
> Exposure Measurements and Analysis Branch
> Human Exposure and Atmospheric Sciences Division
> National Exposure Research Laboratory
> U.S. Environmental Protection Agency
> Mail Drop E205-04
> Research Triangle Park, NC 27711
> Tel: 919-541-0551 Fax 919-541-3527
> email: lindstrom.andrew@epa.gov
> Food Addit Contam Part A Chem Anal Control Expo Risk Assess. 2010 Apr;27
> (4):530-45.
> Dietary intake estimate for perfluorooctanesulphonic acid (PFOS) and
> other perfluorocompounds (PFCs) in UK retail foods following
> determination using standard addition LC-MS/MS.
> Clarke DB, Bailey VA, Routledge A, Lloyd AS, Hird S, Mortimer DN, Gem M.
> Department for Environment, Food and Rural Affairs, Food and Environment
> Research Agency, York YO411LZ, UK. don.clarke@fera.gsi.gov.uk
> Abstract
> The analysis of 252 food samples (UK-produced and imported) purchased
> from a variety of retail outlets in the UK was undertaken for the
> presence of perfluorooctanesulphonic acid (PFOS), perfluorooctanoic acid
> (PFOA) and nine other perfluorocompounds (PFCs). A limit of
> quantification (LOQ) of 1 microg/kg was achieved for all target
> analytes, in all samples. Standard addition was used for quantification
> of PFC levels. All 11 of the targeted PFCs were detected in 75
> individual food items. In 70% of the samples, including all meat other
> than offal, none of the analytes were present above the LOD. The highest
> levels found were 59 microg/kg perfluorooctanesulphonic acid (PFOS) and
> 63 microg/kg total PFCs (SigmaPFCs) in an eel sample, and 40 microg/kg
> PFOS (62 microg/kg SigmaPFCs) in a whitebait sample. The highest level
> in an offal sample was 10 microg/kg, in a wild roe deer liver. There
> were six samples with SigmaPFCs >15 microg/kg (fish, shellfish,
> crustaceans), a further seven samples with SigmaPFCs ranging 11-15
> microg/kg (including a liver), nine with SigmaPFCs ranging 6-10
> microg/kg (fish and livers), 31 with SigmaPFCs in the range 2-5
> microg/kg (including kidneys, popcorn and processed peas) and a further
> 22 with SigmaPFCs close to the LOD of 1 microg/kg (including eggs and
> potatoes). These concentrations indicate that UK consumers are being
> exposed to a low level of PFC contamination from food. The estimated
> upper bound dietary intake of 10 ng/kg bodyweight (bw)/day of PFOS for
> average adult consumers is well below the 0.15 microg (150 ng)/kg bw
> tolerable daily intake (TDI) set by the European Food Safety Authority.
> The lower bound adult dietary intake estimate of 1 ng/kg bw/day is
> similar to estimates undertaken and reported in countries such as
> Canada, Germany and Spain.
```

>

>

--

Regards

Don

\_\_\_\_\_

Dr D B Clarke Room 14GA05

Food and Environment Research Agency

Sand Hutton YORK YO41 1LZ Tel: (01904)462544 Fax: (01904)462111







English PFOS in food.pdf PFOS-Towards accuracy.pdf J of Fluorine chemistry -Fluorous.pdf

Laurence Libelo/DC/USEPA/US

04/12/2010 11:38 AM

To "Johnston, John"

cc Kerry.Dearfield

bcc

Subject PFCs in food papers

John,

FYI in case you have not seen these - there are a few recent PFC in food papers out.

----- Forwarded by Laurence Libelo/DC/USEPA/US on 04/12/2010 11:36 AM -----

From: Shoji Nakayama/CI/USEPA/US

To: Andrew Lindstrom/RTP/USEPA/US@EPA

Cc: adelinsk@yahoo.com, Jessica.Reiner@noaa.gov, Laurence Libelo/DC/USEPA/US@EPA, Shoji

Nakayama/CI/USEPA/US 04/12/2010 10:49 AM

Subject: Re: Fw: UK PFC in food paper

Should read this too. Dust was nothing compare to the milk!



203//1/5.p

Shoji

Date:

\_\_\_\_\_

Shoji F. Nakayama, MD, PhD Phone: (513) 569-7490 Fax: (513) 569-7620

U.S. Environmental Protection Agency

National Risk Management Research Laboratory

\_\_\_\_\_

Andrew Lindstrom All, Check out these papers from Dr.... 04/12/2010 07:47:27 AM

From: Andrew Lindstrom/RTP/USEPA/US

To: Shoji Nakayama/RTP/USEPA/US, adelinsk@yahoo.com, Jessica.Reiner@noaa.gov, Laurence

Libelo/DC/USEPA/US@EPA

Date: 04/12/2010 07:47 AM

Subject: Fw: UK PFC in food paper

AII,

Check out these papers from Dr. Don Clarke.

Good stuff.

Thanks,

## Andy

----- Forwarded by Andrew Lindstrom/RTP/USEPA/US on 04/12/2010 07:45 AM -----

From: Don Clarke <Don.Clarke@fera.gsi.gov.uk>
To: Andrew Lindstrom/RTP/USEPA/US@EPA

Cc: Mark Strynar/RTP/USEPA/US@EPA, Peter Egeghy/RTP/USEPA/US@EPA

Date: 04/12/2010 05:00 AM Subject: Re: UK PFC in food paper

That and some others attached

Lindstrom.Andrew@epamail.epa.gov wrote:

```
> Dr. Clarke,
> I am very interested in your recent paper concerning PFCs in UK food
> samples (specified below).
> I would greatly appreciate it if you would send me a PDF version of this
> paper.
> Thank you very much,
>
> Andy
> Andrew B. Lindstrom, Ph.D.
> Exposure Measurements and Analysis Branch
> Human Exposure and Atmospheric Sciences Division
> National Exposure Research Laboratory
> U.S. Environmental Protection Agency
> Mail Drop E205-04
> Research Triangle Park, NC 27711
> Tel: 919-541-0551 Fax 919-541-3527
> email: lindstrom.andrew@epa.gov
```

```
> Food Addit Contam Part A Chem Anal Control Expo Risk Assess. 2010 Apr;27
> (4):530-45.
> Dietary intake estimate for perfluorooctanesulphonic acid (PFOS) and
> other perfluorocompounds (PFCs) in UK retail foods following
> determination using standard addition LC-MS/MS.
> Clarke DB, Bailey VA, Routledge A, Lloyd AS, Hird S, Mortimer DN, Gem M.
> Department for Environment, Food and Rural Affairs, Food and Environment
> Research Agency, York YO411LZ, UK. don.clarke@fera.gsi.gov.uk
> Abstract
> The analysis of 252 food samples (UK-produced and imported) purchased
> from a variety of retail outlets in the UK was undertaken for the
> presence of perfluorooctanesulphonic acid (PFOS), perfluorooctanoic acid
> (PFOA) and nine other perfluorocompounds (PFCs). A limit of
> quantification (LOQ) of 1 microg/kg was achieved for all target
> analytes, in all samples. Standard addition was used for quantification
> of PFC levels. All 11 of the targeted PFCs were detected in 75
> individual food items. In 70% of the samples, including all meat other
> than offal, none of the analytes were present above the LOD. The highest
> levels found were 59 microg/kg perfluorooctanesulphonic acid (PFOS) and
> 63 microg/kg total PFCs (SigmaPFCs) in an eel sample, and 40 microg/kg
> PFOS (62 microg/kg SigmaPFCs) in a whitebait sample. The highest level
> in an offal sample was 10 microg/kg, in a wild roe deer liver. There
> were six samples with SigmaPFCs >15 microg/kg (fish, shellfish,
> crustaceans), a further seven samples with SigmaPFCs ranging 11-15
> microg/kg (including a liver), nine with SigmaPFCs ranging 6-10
> microg/kg (fish and livers), 31 with SigmaPFCs in the range 2-5
> microg/kg (including kidneys, popcorn and processed peas) and a further
> 22 with SigmaPFCs close to the LOD of 1 microg/kg (including eggs and
> potatoes). These concentrations indicate that UK consumers are being
> exposed to a low level of PFC contamination from food. The estimated
> upper bound dietary intake of 10 ng/kg bodyweight (bw)/day of PFOS for
> average adult consumers is well below the 0.15 microg (150 ng)/kg bw
> tolerable daily intake (TDI) set by the European Food Safety Authority.
> The lower bound adult dietary intake estimate of 1 ng/kg bw/day is
> similar to estimates undertaken and reported in countries such as
> Canada, Germany and Spain.
>
>
>
Regards
Don
Dr D B Clarke
Room 14GA05
Food and Environment Research Agency
Sand Hutton
YORK YO41 1LZ
Tel: (01904)462544
Fax: (01904)462111
```

[attachment "English PFOS in food.pdf" deleted by Shoji Nakayama/CI/USEPA/US] [attachment "PFOS-Towards accuracy.pdf" deleted by Shoji Nakayama/CI/USEPA/US] [attachment "J of Fluorine chemistry -Fluorous.pdf" deleted by Shoji Nakayama/CI/USEPA/US]

> Laurence Libelo/DC/USEPA/US

To "Kelly, James (MDH)"

СС bcc

03/18/2010 12:05 PM

Subject Fw: Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and WWTPs Results

Jim,

Here is some of the information from Dalton GA.

Laurence Libelo

Gail, Is this information public?

03/10/2010 11:23:23 AM

FYI. Latest results.

Dalton 308 Response Feb 24 2010 Monthly Progress Report and LAS and Wildlife Data.PDF



Dalton 308 Response Feb 24 2010 Attachment B 2 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment B 1 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment F WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment E WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment D Wild Turkey Serum.PDF



Dalton 308 Response Feb 24 2010 Attachment C Wild Turkey Muscle and Liver.PDF



Dalton 308 Response Feb 24 2010 Attachment A LAS Monitoring Well and Surface Water.PDF

Laurence Libelo/DC/USEPA/US

01/25/2010 02:55 PM

To "Linda Aller"

СС

bcc

Subject DuPont Response to PCP & EPA MOU Feedback



DuPont 12-18-09 PFOA OPPT-2004-0113.pdf

Laurence Libelo/DC/USEPA/US

05/25/2010 11:39 AM

To "Linda Aller"

CC

bcc

Subject Fw: Ohio River data from ORSANCO

Linda,

The ORSANCO report with information on PFCs and other stuff in the Ohio River is out today.

# Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671



ORCANCO Ohio River report.pdf

Table 4 Concentrations of perfluoroalkyl compounds (PFCs), pharmaceuticals and personal care products (PPCPs), and hormones/sterols in the Ohio River and its tributaries.

Sample number	PFBA	PFPeA	PFHKA	PFHpA	PFOA	PFNA	PFDA	PFUnA	PFDoA	PFBS	PFHxS	PFOS
· · · ·	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L	ng/L
1	1.14	1.08	< MRL	< MRL	2.04	< MRL	< MRL	< MRL	< MRL	2.51	< MRL	2.24
2	< MRL	1.34	1.85	1.11	3.87	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.79
3	1.53	1.84	2.35	1.57	3.41	< MRL	< MRL	< MRL	< MRL	2.31	< MRL	2.63
4	1.09	1.17	1.31	1.24	2.50	1.04	< MRL					
5	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL					
6	1.49	1.76	1.56	1.45	3.01	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.82
7	2.44	3.63	3.95	2.01	5.39	1.37	1.16	< MRL	< MRL	< MRL	< MRL	4.42
8	2.13	2.00	2.49	2.63	35.2	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.88
9	< MRL	< MRL	< MRL	< MRL	1.48	< MRL	< MRL	< MRL	< MRL	18.4	< MRL	< MRL
10	1.37	1.16	1.56	1.66	19.1	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.71
11	3.89	3.30	4.69	2.85	6.22	1.74	1.01	< MRL	< MRL	< MRL	< MRL	5.14
12	2.21	1.32	2.55	1.35	14.1	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	3.15
13	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL					
14	1.01	1.56	1.71	1.58	13.1	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	2.58
15	1.46	1.53	2.35	1.62	14.4	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	4.97
16	5.29	13.7	7.83	4.4	14.3	1.64	< MRL	< MRL	< MRL	4.61	2.98	7.36
17	1.83	1.94	2.42	1.37	9.21	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	5.58
18	1.97	3.07	2.78	2.11	9.44	0.993 S	< MRL	5.80				
19	2.69	2.09	2.95	1.59	11.5	1.22 S	1.65	3.02	4.75	< MRL	< MRL	7.27
20	5.75	8.59	10.4	4.30	18.2	6.17 S	8.04	< MRL	< MRL	111	< MRL	669
21	1.40	1.81	2.30	1.32	3.43	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	3.90
22	1.52	2.26	1.97	1.17	8.93	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	6.49
23	12.5	4.65	9.48	7.67	23.9	< MRL	< MRL	< MRL	< MRL	16.5	5.62	35.4
24	15.7	6.68	14.7	9.14	31.2	8.08 S	2.95	< MRL	< MRL	31.8	8.91	29.2
25	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL	< MRL					
	7											
26 (FS)	15.2	13.5	13.7	14.2	11.6	12.2	10.1	7.96	3.12	13.0	9.67	4.19
26 (SL)	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0
27 (FS)	215	196	199	211	174	178	181	113	42.6	177	149	79.1
27 (SL)	200	200	200	200	200	200	200	200	200	200	200	200
MRI	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	2.00	2.00	2.00

FS - Field Spike (result)

# **Table 1**: Sample numbers and general location information.

## Sample Number Location River River Mile\* Date

- 1 Tributary Allegheny 9.5 9/14/2009
- 2 Tributary Monongahela 5.0 9/14/2009
- 3 Ohio River Mainstem (EI) Ohio 3.1 9/14/2009
- 4 Ohio River Mainstem Ohio 9.7 9/14/2009
- 5 Ohio River Mainstem (FB) Ohio 462.9 9/16/2009
- 6 Ohio River Mainstem Ohio 86.7 9/14/2009
- 7 Ohio River Mainstem (EI) Ohio 91.3 9/14/2009
- 8 Ohio River Mainstem Ohio 220.3 9/15/2009
- 9 Tributary Kanawha 4.1 9/15/2009
- 10 Ohio River Mainstem Ohio 306.8 9/15/2009
- 11 Tributary Scioto 105.8 10/20/2009
- 12 Ohio River Mainstem Ohio 394.9 9/15/2009
- 13 Ohio River Mainstem (FB) Ohio 220.3 9/15/2009
- 14 Ohio River Mainstem Ohio 462.9 9/16/2009
- 15 Ohio River Mainstem (EI) Ohio 478.0 9/16/2009
- 16 Tributary Mill Creek 0.2 9/16/2009
- 17 Ohio River Mainstem Ohio 600.5 9/21/2009
- 18 Ohio River Mainstem (EI) Ohio 612.2 9/21/2009

SL - Spiked Level (expected)

19 Ohio River Mainstem Ohio 791.5 9/21/2009

20 Ohio River Mainstem (EI) Ohio 791.8 9/21/2009

21 Tributary Wabash 0.8 9/21/2009

22 Ohio River Mainstem Ohio 889.1 9/21/2009

23 Ohio River Mainstem Ohio 934.4 9/22/2009

24 Ohio River Mainstem (EI) Ohio 935.9 9/22/2009

25 Tributary (FB) Scioto 105.8 10/20/2009

26 PFC Field Spike 1 (Low) Scioto 105.8 10/20/2009

27 PFC Field Spike 2 (High) Scioto 105.8 10/20/2009

\* 

Tributary river miles are assigned by the number of miles upstream of the confluence with the Ohio River proper.

EI □ Effluent influenced

 $\mathsf{FB} \ \square \ \mathsf{Field} \ \mathsf{blank} \ \mathsf{taken} \ \mathsf{at} \ \mathsf{this} \ \mathsf{location}$ 

**ORSANCO Page 10 of 279** 

Laurence Libelo/DC/USEPA/US To "MacLean, Bradley"

cc bcc

04/20/2010 11:52 AM

Subject AFFF paper and PPT

Brad,

AFFF use can lead to long term soil contamination. If there was a use then they may have other source zones.

Also after looking at this PPT do you think they might have an environmental contamination issue?



FireSprinklerTest.pps

## Laurence

\_\_\_\_\_\_

E. Laurence Libelo, Ph.D., PG Senior Environmental Engineer Exposure Assessment Branch Office of Pollution Prevention and Toxics U.S. Environmental Protection Agency OPPTS/OPPT/EETD/EAB 202-564-8553 FAX 202-546-8671

> Laurence Libelo/DC/USEPA/US

To "MacLean, Bradley"

cc bcc

Subject Fw: AFFF info

Brad,

Nice talking to you this morning. Please feel free to call me anytime.

Here is some information on AFFF at Tyndall AFB and Fire Training sites in general. There is not too much out there but these will give you a good idea of the issues. You probable have these but in case you don't here are some references:

McDiarmid MA, Lees PS, Agnew J, Midzenski M, Duffy R. Occurrence and persistence of perfluorooctanesulfonate and other perfluorinated surfactants in groundwater at a fire-training area at Wurtsmith Air Force Base, Michigan, USA. J Environ Monit. 2003 Apr;5(2):341-5.

Moody CA, Hebert GN, Strauss SH, Field JA. Occurrence and persistence of perfluorooctanesulfonate and other perfluorinated urfactants in groundwater at a fire-training area at Wurtsmith Air Force Base, Michigan, USA J Environ Monit. 2003 Apr;5(2):341-5.





AFFF GW.pdf llavine et al.pdf

Here is link to the SRDUP call for proposals that is out right now on PFCs from AFFF at fire training sites. They estimate that there are about 600 of these sites that need that need remediation. This gives an idea of the size of the issue within DoD

http://www.serdp.org/funding/Core-Sons.cfm

Please feel free to call if you need more information.

Laurence

\_\_\_\_\_

E. Laurence Libelo, Ph.D., PG Senior Environmental Engineer Exposure Assessment Branch Office of Pollution Prevention and Toxics U.S. Environmental Protection Agency OPPTS/OPPT/EETD/EAB 202-564-8553 FAX 202-546-8671 Laurie Hunter/RTP/USEPA/US

To Laurence Libelo

03/19/2010 04:22 PM

СС bcc

Subject Requested Article/Document Attached: Journal of

Environmental Science and Health, Part A; 45(4): 432-446

The article/document you requested is attached. Please reply if you have any questions or problems with the file.



modeling the hydrolysis of perfluorinated compounds.pdf

Note: The attached material may be protected by US Copyright (Title 17 US Code).

We hope you'll take a moment to let us know how satisfied you are with the EPA-RTP Library's services by responding to a short questionnaire. Please click on the link below to let us know how we are doing. We appreciate your feedback! http://www.surveymonkey.com/s.asp?u=878843202145

Laurie J. Hunter Interlibrary Loan Intern US EPA Library UNC Contract Staff, C267-01 109 Alexander Drive Research Triangle Park, NC 27711

Phone: 919/541-2777 Fax: 919/541-1405

Email: hunter.laurie@epa.gov

Laurie Hunter/RTP/USEPA/US

To Laurence Libelo

02/08/2010 12:04 PM

СС bcc

Subject Requested Article/Document Attached: Polymer Degradation and Stability, Vol. 91, Issue 3, March 2006, Pages 512-516

The article/document you requested is attached. Please reply if you have any questions or problems with the file.



investigation on the thermal degradation of acrylic polymers.pdf

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We hope you'll take a moment to let us know how satisfied you are with the EPA-RTP Library's services by responding to a short questionnaire. Please click on the link below to let us know how we are doing. We appreciate your feedback! http://www.surveymonkey.com/s.asp?u=878843202145

Laurie J. Hunter Interlibrary Loan Intern US EPA Library UNC Contract Staff, C267-01 109 Alexander Drive Research Triangle Park, NC 27711

Phone: 919/541-2777 Fax: 919/541-1405

Email: hunter.laurie@epa.gov

Laurie Hunter/RTP/USEPA/US

To Laurence Libelo

СС

02/08/2010 11:59 AM

bcc

Subject Requested Article/Document Attached: Progress in Polymer

Science, Vol. 34, Issue 6, June 2009, Pages 479-515

The article/document you requested is attached. Please reply if you have any questions or problems with the file.



nanoscale particles for polymer degradation and stabilization.pdf

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We hope you'll take a moment to let us know how satisfied you are with the EPA-RTP Library's services by responding to a short questionnaire. Please click on the link below to let us know how we are doing. We appreciate your feedback! http://www.surveymonkey.com/s.asp?u=878843202145

Laurie J. Hunter Interlibrary Loan Intern US EPA Library UNC Contract Staff, C267-01 109 Alexander Drive Research Triangle Park, NC 27711

Phone: 919/541-2777 Fax: 919/541-1405

Email: hunter.laurie@epa.gov

Mark Strynar/RTP/USEPA/US

To est

04/28/2010 08:50 AM

cc Andrew Lindstrom, Laurence Libelo, "Darcy Gentleman"

bcc

Subject ES&T foucus issue from U.S. EPAs PFAA Days III

Dr. Schnoor,

Please find attached our proposal for a focus issue for ES&T we envision coming from the U.S. EPA's PFAA Days III to be held in June. We look forward to hearing from you on this issue.

Thank you, Mark Strynar



Dr. Mark J. Strynar USEPA ORD/NERL Physical Scientist phone 919-541-3706 fax 919-541-3527

Mark Strynar/RTP/USEPA/US

06/14/2010 10:03 AM

To kerry.dearfield

cc Laurence Libelo, Andrew Lindstrom, Christopher Lau

bcc

Subject 14C-PFOA quote

Kerry,

It was nice to meet you last week at PFAA Days III and to hear about your work. Find below an attached quote from 2006 from ABC labs to synthesize the 14C-PFOA which I enquired about at the time.

I am sure the quote is no good anymore but their ability and willingness to synthesize this likely has not changed. All that was need was the cold perfluoroheptane-lodide for the symthesis to PFOA. I would guess further perfluoro- homologues such as the PFDA or PFUnA would have a comparable need for a cold starting compound (C9-lodide or C10-iodide respectively). I am told the PFOS 14C- label is more difficult to do since it is a multistep process. Good luck.

Mark

Dr. Mark J. Strynar USEPA ORD/NERL Physical Scientist phone 919-541-3706 fax 919-541-3527

---- Forwarded by Mark Strynar/RTP/USEPA/US on 06/14/2010 09:55 AM -----

From: Mark Strynar/RTP/USEPA/US

To: "Klaunig, James E." <jklauni@iupui.edu>

Date: 08/04/2007 07:28 AM

Subject: Re:

Jim,

Try this company in the attached quote. The seemed reasonable and knowledgable. I never got this stuff made. It was for 14C-PFOA.

Mark



Dr. Mark J. Strynar USEPA ORD/NERL Physical Scientist phone 919-541-3706 fax 919-541-3527

"Klaunig, James E." <jklauni@iupui.edu>

"Klaunig, James E." <jklauni@iupui.edu>

To Mark Strynar/RTP/USEPA/US@EPA

07/30/2007 05:47 PM

Subject

СС

Hi mark

Thanks for all your help on the PFC deal The group I am working with is having a hard time finding a company to radiolabel their product for use in PK studies

Any suggestions

(they appear to have contacted amersham - with no luck)

Jim

 ${\tt PS}$   $\;$  we need to get together sometime and talk, I have some suggestions on some studies with can do together with  ${\tt PFOA}$ 

Jim

Rob Hale <hale@vims.edu>

To Laurence Libelo

02/03/2010 09:31 AM

cc bcc

Subject Fwd: PFCs

Laurence:

I sent the below to an old contact at 3M. It bounced back. You mentioned

at one point some industry connections? Anyone interested in airborne transmission from sludge? Think the sludge thing is still interesting. I may ping my Chicago contacts as well...of course I owe them a manuscript.

Rob

```
>Date: Wed, 03 Feb 2010 09:25:24 -0500
>To: dlbacon@mmm.com
>From: Rob Hale <hale@vims.edu>
>Subject: PFCs
>Dale:
>Wondered if you were still at 3M? Have not conversed for some years now.
>We have become more interested in the PFCs as of late. We have acquired a
>LC/MS and have done some GC/MS of headspace of sewage sludge biosolids and
>saw some FtOHs. We also did some PBDE work on sludges for Chicago. Saw
>the below story. Wondered if you folks still have interests in related
>collaborations. Thought this might be a joint interest.
>
        Rob
>>>EPA targets chemical often dumped in Chicago sewers
>>>
>>>Chemicals used in Scotchgard and Teflon are regulated, but metal plating
>>>companies got a pass by Bush's EPA
>>>
>>>
>>>
>>>
>>>By Michael Hawthorne, Tribune reporter January 31, 2010
>>>
>>>
http://www.chicagotribune.com/news/local/ct-met-metal-plating-pollution-201001
31,0,4461253,email.story>E-mail
http://www.chicagotribune.com/news/local/ct-met-metal-plating-pollution-201001
31,0,4129009,print.story>Print
>>><javascript:void(0)>Share
>>>3f23207f.jpg3f23209e.jpgText Size
>>>
>>>
>>>Alarmed by research linking chemicals used to make Scotchgard and Teflon
>>>to cancer, liver disease and other health problems, the federal
>>>government spent the last decade pressuring manufacturers to phase out
>>>the stain-resistant compounds.
>>>But scientists at the
http://www.chicagotribune.com/topic/environmental-issues/environmental-cleanup
/u.s.-environmental-protection-agency-ORGOV000048.topic>U.S.
```

>>>Environmental Protection Agency recently discovered that a different >>>industry  $\hat{a}$ €" metal plating  $\hat{a}$ €" is dumping high levels of the chemicals >>>into sewers in Chicago and Cleveland, and likely is doing the same thing >>>in scores of other cities. >>> >>>The finding is worrisome because the chemicals, known as perfluorinated >>>compounds, or PFCs, wash unfiltered through sewage treatment plants into >>>lakes and streams. The chemicals don't break down in the environment, >>>and traces are showing up in the blood of people and wildlife around the globe. >>> >>>At one Chicago-area metal plating shop, which the EPA does not name, the >>>agency found PFCs being flushed into the sewers at concentrations of >>>12,214 parts per trillion, far higher than the 2.5 parts per trillion >>>found in water piped into the factory. >>> >>>Levels were even higher at one of the Cleveland shops: more than 54,000 >>>parts per trillion. >>> >>>Mindful that those amounts are some of the highest detected in >>>wastewater to date, career staff at the EPA are urging the Obama >>>administration to crack down on the metal plating industry's use of >>>PFCs, which are used to suppress fumes during the plating of chrome >>>automotive bumpers, wheels and other parts. >>>In 2007, records show, the Bush administration created a special >>>exemption that allowed metal plating shops to avoid any regulations on >>>perfluorinated compounds because the industry said it had no >>>alternatives. Agency leaders in Washington granted the waiver despite >>>objections from the EPA's top official in Chicago, who noted in an >>>internal memo that safer alternatives are readily available. >>> >>>"We had plenty of warning signs," said Mary Gade, the former EPA >>>regional administrator, recalling the debate at the time within the >>>agency. "Our point was these chemicals pose serious concerns for health >>>and the environment." >>>Muddying the issue is that PFCs have been considered a relatively >>>inexpensive way for metal plating shops to curb emissions of another >>>highly toxic substance, hexavalent chromium. >>>Industry representatives contend they need time to test PFC-free >>>chemicals, though one of the nation's largest metal platers already has >>>switched to a solution that is significantly less toxic. >>>"We want to make sure we don't do more harm than good," said Christian >>>Richter, spokesman for the National Association of Surface Finishing, a >>>trade group. >>> >>>What the Obama administration decides to do next could affect hundreds >>>of factories. There are nearly 200 metal plating shops in Illinois >>>alone, most of which can be found in nondescript industrial buildings in >>>Chicago and the suburbs. In California, a 2003 survey found that most of >>>the state's 222 metal platers used PFCs to reduce chromium emissions. >>>What these factories do is by definition a dirty business. To apply a >>>shiny finish, parts are dipped into electrified vats of hexavalent >>>chromium, the highly toxic, cancer-causing metal made infamous by the >>>movie "Erin Brockovich." PFCs are added to the tanks to prevent the

>>>formation of chromium-laden bubbles.

```
>>>Using the chemical solution helps metal platers meet federal limits on
>>>chromium emissions, which pose serious health hazards in the workplace
>>>and surrounding neighborhoods. But doing so creates another hazard when
>>>PFCs are flushed into the sewers as metal parts are rinsed.
>>>
>>>Platers are required to treat their wastewater on site to remove
>>>chromium residue. However, conventional treatment does not screen out PFCs.
>>>For more than half a century, manufacturers used perfluorinated
>>>chemicals virtually unregulated to make nonstick cookware,
>>>rain-repellent clothing, grease-resistant packaging and hundreds of
>>>other products. They are most commonly known as ingredients in household
>>>items sold under the Scotchgard and Teflon brands. The lack of
>>>government oversight has slowly changed as scientists have found the
>>>chemicals in salmon from the Great Lakes, polar bears in the Arctic and
>>>dolphins in the Mediterranean Sea, suggesting that PFCs travel easily
>>>through water and the atmosphere. They are so resilient that it takes
>>>years for the chemicals to be excreted from the human body.
>>>
>>>Under pressure from the EPA, Minnesota-based
>>><
http://www.chicagotribune.com/topic/economy-business-finance/minnesota-mining-
%26-manufacturing-company-ORCRP010072.topic>3M,
>>>once the world's largest maker of PFCs, has phased out production of one
>>>chemical used to make Scotchgard. Other companies, including DuPont, the
>>>maker of Teflon, have pledged to stop making the chemicals by 2015, and
>>>the EPA has adopted several rules to prevent them from being used for
>>>various purposes.
>>>
>>>Metal platers would have been included in one of those rules, but the
>>>2007 exemption granted by the EPA allowed the industry to continue using
>>>PFCs without regulations.
>>>
>>>PFC waste from metal platers first came to light two years ago in
>>>Minnesota. As part of a broad investigation of pollution from 3M,
>>>investigators tested wastewater from more than two dozen sewage
>>>treatment plants. They traced high levels of PFCs in the northern
>>>Minnesota community of Brainerd to Keystone Automotive, a large chrome
>>>bumper refinisher.
>>> "The numbers really jumped out at us," said James Kelly, a researcher
>>>with the Minnesota Department of Health. "But these findings are so new
>>>that we're still trying to understand the extent of the problem."
>>>Keystone officials did not respond to several requests for comment. In a
>>>study Kelly wrote, he notes the plant responded to his findings by
>>>switching to a PFC-free solution that also prevents chromium from
>>>bubbling out of its plating vats.
>>>The rest of the industry apparently has been slow to follow. Scientists
>>>from the EPA's Chicago office found high levels of PFCs in the
>>>wastewater of seven Chicago factories and four more in Cleveland,
>>>according to a study published late last year. The agency declined to
>>>name the plants, citing an agreement that granted operators anonymity in
>>>return for access to draw samples of the unregulated pollutants.
>>>The findings are so new that officials at the Metropolitan Water
>>>Reclamation District of Greater Chicago, the agency that operates the
>>>area's sewage treatment plants, said they were unaware that PFCs could
```

```
>>>be a problem locally.
>>>
>>>Two years ago, tests conducted for the Tribune found tiny amounts of
>>>PFCs in treated Chicago drinking water. Though sewage from the Chicago
>>>area drains away from Lake Michigan, the source of the region's drinking
>>>water, more than 300 other cities dump treated waste into the lake and
>>>its tributaries, according to the EPA.
>>>
>>>More metal platers will be tested this year. The findings could lead to
>>>new rules restricting PFCs in metal plating shops, which would stop a
>>>steady stream of the chemicals into the environment.
>>>"We're trying to get the word out about this issue," said Kim Harris, an
>>>EPA scientist. "This could be a major source of PFCs in water, but the
>>>good news is there are alternatives out there that can be adopted
immediately."
>>>
>>><mailto:mhawthorne@tribune.com>mhawthorne@tribune.com
>>>
>>>
>>>textSize()
>>>Copyright © 2010, <http://www.chicagotribune.com/>Chicago Tribune
>>
>>Rob Hale, Professor
>>Department of Environmental & Aquatic Animal Health
>>Virginia Institute of Marine Science
>>College of William and Mary
>>
>>Mail
>>Virginia Institute of Marine Science
>>PO Box 1346
>>Gloucester Pt, VA 23062
>>
>>Deliveries
>>Rob Hale
>>Virginia Institute of Marine Science
>>C/O Central Receiving
>>1208 Greate Road
>>Gloucester Pt, VA 23062
                                             3f23207f.jpg
                                                       3f23209e.jpg
```

Shoji Nakayama/CI/USEPA/US

>>phone (804) 684-7228; fax (804)-684-7186

To Andrew Lindstrom

04/12/2010 10:49 AM

cc adelinsk, Jessica. Reiner, Laurence Libelo, Shoji Nakayama

bcc

Subject Re: Fw: UK PFC in food paper

Should read this too. Dust was nothing compare to the milk!



# Shoji

\_\_\_\_\_

Shoji F. Nakayama, MD, PhD Phone: (513) 569-7490 Fax: (513) 569-7620

U.S. Environmental Protection Agency National Risk Management Research Laboratory 26 West Martin Luther King Drive, MS 190 Cincinnati, OH 45268

\_\_\_\_\_\_

# Andrew Lindstrom All, Check out these papers from Dr.... 04/12/2010 07:47:27 AM

From: Andrew Lindstrom/RTP/USEPA/US

To: Shoji Nakayama/RTP/USEPA/US, adelinsk@yahoo.com, Jessica.Reiner@noaa.gov, Laurence

Libelo/DC/USEPA/US@EPA

Date: 04/12/2010 07:47 AM Subject: Fw: UK PFC in food paper

All,

Check out these papers from Dr. Don Clarke.

Good stuff.

Thanks,

## Andy

----- Forwarded by Andrew Lindstrom/RTP/USEPA/US on 04/12/2010 07:45 AM -----

From: Don Clarke <Don.Clarke@fera.gsi.gov.uk>
To: Andrew Lindstrom/RTP/USEPA/US@EPA

Cc: Mark Strynar/RTP/USEPA/US@EPA, Peter Egeghy/RTP/USEPA/US@EPA

Date: 04/12/2010 05:00 AM Subject: Re: UK PFC in food paper

That and some others attached

Lindstrom.Andrew@epamail.epa.gov wrote:

```
> Dr. Clarke,
> I am very interested in your recent paper concerning PFCs in UK food
> samples (specified below).
> I would greatly appreciate it if you would send me a PDF version of this
> paper.
> Thank you very much,
> Andy
> Andrew B. Lindstrom, Ph.D.
```

```
> Exposure Measurements and Analysis Branch
> Human Exposure and Atmospheric Sciences Division
> National Exposure Research Laboratory
> U.S. Environmental Protection Agency
> Mail Drop E205-04
> Research Triangle Park, NC 27711
> Tel: 919-541-0551 Fax 919-541-3527
> email: lindstrom.andrew@epa.gov
> Food Addit Contam Part A Chem Anal Control Expo Risk Assess. 2010 Apr;27
 (4):530-45.
> Dietary intake estimate for perfluorooctanesulphonic acid (PFOS) and
> other perfluorocompounds (PFCs) in UK retail foods following
> determination using standard addition LC-MS/MS.
> Clarke DB, Bailey VA, Routledge A, Lloyd AS, Hird S, Mortimer DN, Gem M.
> Department for Environment, Food and Rural Affairs, Food and Environment
> Research Agency, York YO411LZ, UK. don.clarke@fera.gsi.gov.uk
> Abstract
> The analysis of 252 food samples (UK-produced and imported) purchased
> from a variety of retail outlets in the UK was undertaken for the
> presence of perfluorooctanesulphonic acid (PFOS), perfluorooctanoic acid
> (PFOA) and nine other perfluorocompounds (PFCs). A limit of
> quantification (LOQ) of 1 microg/kg was achieved for all target
> analytes, in all samples. Standard addition was used for quantification
> of PFC levels. All 11 of the targeted PFCs were detected in 75
> individual food items. In 70% of the samples, including all meat other
> than offal, none of the analytes were present above the LOD. The highest
> levels found were 59 microg/kg perfluorooctanesulphonic acid (PFOS) and
> 63 microg/kg total PFCs (SigmaPFCs) in an eel sample, and 40 microg/kg
> PFOS (62 microg/kg SigmaPFCs) in a whitebait sample. The highest level
> in an offal sample was 10 microg/kg, in a wild roe deer liver. There
> were six samples with SigmaPFCs >15 microg/kg (fish, shellfish,
> crustaceans), a further seven samples with SigmaPFCs ranging 11-15
> microg/kg (including a liver), nine with SigmaPFCs ranging 6-10
> microg/kg (fish and livers), 31 with SigmaPFCs in the range 2-5
> microg/kg (including kidneys, popcorn and processed peas) and a further
> 22 with SigmaPFCs close to the LOD of 1 microg/kg (including eggs and
> potatoes). These concentrations indicate that UK consumers are being
> exposed to a low level of PFC contamination from food. The estimated
> upper bound dietary intake of 10 ng/kg bodyweight (bw)/day of PFOS for
> average adult consumers is well below the 0.15 microg (150 ng)/kg bw
> tolerable daily intake (TDI) set by the European Food Safety Authority.
> The lower bound adult dietary intake estimate of 1 ng/kg bw/day is
> similar to estimates undertaken and reported in countries such as
> Canada, Germany and Spain.
>
>
Regards
```

Don

Dr D B Clarke

Room 14GA05

Food and Environment Research Agency

Sand Hutton YORK YO41 1LZ

Tel: (01904)462544 Fax: (01904)462111

[attachment "English PFOS in food.pdf" deleted by Shoji Nakayama/CI/USEPA/US] [attachment "PFOS-Towards accuracy.pdf" deleted by Shoji Nakayama/CI/USEPA/US] [attachment "J of Fluorine chemistry -Fluorous.pdf" deleted by Shoji Nakayama/CI/USEPA/US]

Shoji Nakayama/CI/USEPA/US

03/15/2010 09:42 AM

To Andrew Lindstrom, Mark Strynar, Amy Delinsky

cc Marc Mills, Laurence Libelo

bcc

Subject Interesting article about AFFF from John Martin's group

FYI



\_\_\_\_\_

Shoji F. Nakayama, MD, PhD Phone: (513) 569-7490 Fax: (513) 569-7620

U.S. Environmental Protection Agency National Risk Management Research Laboratory 26 West Martin Luther King Drive, MS 190 Cincinnati, OH 45268

Shoji Nakayama/CI/USEPA/US

To Andrew Lindstrom, Mark Strynar, Laurence Libelo

04/26/2010 09:42 AM bcc

Subject Safe level PFOA in drinking water

FYI

Interesting discussion is going on.

Tardiff RG, Carson ML, Sweeney LM, Kirman CR, Tan YM, Andersen M, Bevan C, Gargas ML. 2009. Derivation of a drinking water equivalent level (dwel) related to the maximum contaminant level goal for perfluorooctanoic acid (PFOA), a persistent water soluble compound. Food Chem Toxicol 47: 2557-2589.



Letter RE: Tardiff RG, Carson ML, Sweeney LM, Kirman CR, Tan YM, Andersen M, Bevan C, Gargas ML. 2009. Derivation of a drinking water equivalent level (dwel) related to the maximum contaminant level goal for perfluorooctanoic acid (PFOA), a persistent water soluble compound. Food Chem Toxicol



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\_\_\_\_\_

Shoji Nakayama/CI/USEPA/US To Laurence Libelo

03/18/2010 01:05 PM

cc bcc

Subject 6:2 FTOH to C7 (PFHpA)?

Laurence,

You meant 6:2 FTOH to C7 (PFHpA), right? It should be possible chemically but I can't find any literature showing the biodeg evidence so far. It could be really rapid transformation from 6:2 aldehyde (6:2 FTA) skipping C7 or 6:2 FTA is not symply bioavailable.

Sorry, not much help. I'll keep eyes open.

Shoji

POF POF

Liu et al 2010\_6-2 FT0H.pdf Liu et al 2010\_6-2 FT0HSI.pdf

Shoji F. Nakayama, MD, PhD Phone: (513) 569-7490 Fax: (513) 569-7620

U.S. Environmental Protection Agency National Risk Management Research Laboratory 26 West Martin Luther King Drive, MS 190 Cincinnati, OH 45268 \_\_\_\_\_

Shoji Nakayama/CI/USEPA/US To Marc Mills, Laurence Libelo

СС

03/26/2010 01:54 PM

bcc

Subject Fw: PFPA paper

FYI

\_\_\_\_\_\_

Shoji F. Nakayama, MD, PhD Phone: (513) 569-7490 Fax: (513) 569-7620

U.S. Environmental Protection Agency

National Risk Management Research Laboratory 26 West Martin Luther King Drive, MS 190

Cincinnati, OH 45268

---- Forwarded by Shoji Nakayama/CI/USEPA/US on 03/26/2010 01:54 PM -----

From: Christopher Lau/RTP/USEPA/US

To: Mark Strynar/RTP/USEPA/US@EPA, Katoria Tatum/RTP/USEPA/US@EPA, Kaberi

Das/RTP/USEPA/US@EPA, Barbara Abbott/RTP/USEPA/US@EPA, Cynthiaj Wolf/RTP/USEPA/US@EPA, Andrew Watkins/RTP/USEPA/US@EPA, Mitch Rosen/RTP/USEPA/US@EPA, Andrew Lindstrom/RTP/USEPA/US@EPA, Shoji

Nakayama/CI/USEPA/US

Cc: Jennifer Seed/DC/USEPA/US@EPA, Elizabeth Doyle/DC/USEPA/US@EPA, Joyce

Donohue/DC/USEPA/US@EPA, Amal Mahfouz/DC/USEPA/US@EPA, Andrea

Pfahles-Hutchens/DC/USEPA/US@EPA, David Lai/DC/USEPA/US@EPA, aic7@cdc.gov

Date: 03/26/2010 09:15 AM

Subject: PFPA paper



Chris

Shoji Nakayama/CI/USEPA/US To Mark Strynar

cc Andrew Lindstrom, Laurence Libelo

05/31/2010 10:56 AM

bcc

Subject Re: poster/presentation/paper?

Mark,

I got this from Anne. Is this the one you were looking for?

### Shoji



\_\_\_\_\_

Shoji F. Nakayama, MD, PhD Phone: (513) 569-7490 Fax: (513) 569-7620

U.S. Environmental Protection Agency National Risk Management Research Laboratory 26 West Martin Luther King Drive, MS 190 Cincinnati, OH 45268

\_\_\_\_\_

Mark Strynar Does anyone have the poster/presentati... 05/27/2010 11:47:41 AM

From: Mark Strynar/RTP/USEPA/US

To: Andrew Lindstrom/RTP/USEPA/US@EPA, Nakayama.Shoji@epamail.epa.gov, Laurence

Libelo/DC/USEPA/US@EPA

Date: 05/27/2010 11:47 AM Subject: poster/presentation/paper?

Does anyone have the poster/presentation/paper that shows high concentrations of FTOHs in the air in specialty stores by Anna Karrman I believe?

Mark

Dr. Mark J. Strynar USEPA ORD/NERL Physical Scientist phone 919-541-3706 fax 919-541-3527

Toni Krasnic/DC/USEPA/US

01/27/2010 01:06 PM

To John Washington cc Laurence Libelo

bcc

Subject Re: Fw: report

Hey John,

Please find it attached.

tk 561

564.0984



John Washington Hi Toni, Would you know how I can g... 01/27/2010 11:32:33 AM

From: John Washington/ATH/USEPA/US
To: Toni Krasnic/DC/USEPA/US@EPA

Date: 01/27/2010 11:32 AM

Subject: Fw: report

Hi Toni,

Would you know how I can get hold of the report listed below?

Thanks for any guidance -- John

John Washington
United States Environmental Protection Agency
National Exposure Research Laboratory
Ecosystems Research Division
960 College Station Road
Athens, GA 30606
phone: (706) 355-8227

phone: (706) 355-8227 fax: (706) 355-8202

email: washington.john@epa.gov http://www.epa.gov/athens/

---- Forwarded by John Washington/ATH/USEPA/US on 01/27/2010 11:31 AM -----

To: John Washington/ATH/USEPA/US@EPA

Date: 01/27/2010 09:41 AM

Subject: report

Hi John,

Do you have or can you get the following report? It apparently documents high PFOS levels in Decatur sediments. If not, I'll have our secretary start to track it down. (I assume these EPA reports are easier for you to get - but maybe not.)

Pete

Giesy, JP and Newsted, JL (2001). Selected Fluorochemicals in the Decatur, Alabama Area. Prepared for 3M, St Paul, MN. In US EPA Administrative Record AR226-1030A.

01/27/2010 02:01 PM

cc Gerry Brown, Cathy Fehrenbacher

bcc

Subject DuPont MOU request

Hi Linda,

Please find below the documents that you requested.

We will contact the Docket to find out why these documents are not getting loaded into Regulations.gov.

Please contact Gerry if you need any other documents related to this MOU.

Sincerely,

#### Toni Krasnic

EPA/OPPTS/OPPT/CCD/ECB

EPA East; 1201 Constitution Ave NW, Room 4351C; Washington, DC 20004 *Mail:* EPA; 1200 Pennsylvania Ave NW; MC-7405M; Washington, DC 20460

Phone: 202-564-0984; Fax: 202-564-4775
PFOA Website: http://www.epa.gov/oppt/pfoa

TSCA 8(e) Website: http://www.epa.gov/opptintr/tsca8e





Jim willis letter\_09.24.09.pdf Quarterly MOU Status Report #16, Phase II Monitoring Samplin.pdf





MOU response to pcp 12-18-09 final.pdf clewell serum calcs 11-20-09125a2ce5270.pdf

Toni Krasnic/DC/USEPA/US

To Laurence Libelo

12/17/2009 02:13 PM

cc bcc

Subject Emmett



Community Expossure to PFOA\_Emmett poster\_Science Forum\_May, 2005.ppt



Community Exposure to PFOA. Relationships between serum levels and certain health parameters. Emmett 06.06.pdf



Community Exposure to PFOA\_Relationships between serum concentrations and exposure sources\_Emmett\_06.06.pdf

Toni Krasnic/DC/USEPA/US

To Laurence Libelo

05/06/2010 03:58 PM

cc bcc Subject Perfluorooctanoic acid and perfluorooctane sulfonate released from a waste water treatment plant in Bavaria, Germany

http://www.springerlink.com/content/51465788u72lrt66/



PFOA & PFOS released from a waste water treatment plant in Bavaria, Germany\_Becker.pdf

<werling@daikin-america.com</pre>

To Laurence Libelo

03/24/2010 02:08 PM

cc bcc

Subject Flow data

Here is the excel sheet with the flow data for DSN009

(See attached file: DMR Summary 2003 - 2006 for DSN009.xls)

Regards,

Ralph Werling Environmental Manager Daikin America, Inc MDA Manufacturing, Inc 256-306-5000

This e-mail and/or its attachments may contain information that is privileged, confidential and proprietary to Daikin America, Inc. You are hereby notified that any dissemination, distribution, or copying of this communication is prohibited. If you have received this communication in error, please immediately delete it from your computer and notify the sender



by replying to this electronic e-mail.

DMR Summary 2003 - 2006 for DSN009.xls

"Gloria Post" <Gloria.Post@dep.state.nj.us> To "Gloria Post"

CC

02/03/2010 08:51 AM

bcc

Subject Chemical and Engineering News Cover Story on PFCs

FYI, in case you haven't already seen it.

Gloria



ES&T PFC Cover Story.pdf

"Gloria Post" <Gloria.Post@dep.state.nj.us>

To cooper, "Judy Louis", "Lee Lippincott", Andrew Lindstrom, Mark Strynar, Laurence Libelo

СС

12/01/2009 12:06 PM

bcc

Subject Paper on PFCs in soil, sediments, sludge

Attached is a new paper on PFCs in soil, sediment, and sludge.

I have not read it yet.

Gloria



Science of the Total Environnment PFCs in soil, sludge, sediment paper.pdf

"Gloria Post" <Gloria.Post@dep.state.nj.us>

04/23/2010 11:52 AM

To robson, dpringle, judith.klotz, "Leslie McGeorge", Joyce Donohue, Elizabeth Doyle, Christopher Lau, Andrew Lindstrom, Mark Strynar, Laurence Libelo, sfrisbee, dcaldwel, Helen.Goeden

CC

bcc

Subject K. Cooper letter to editor about Tardiff et al. PFOA risk assessment, and R. Tardiff response

FYI, I am attaching a letter to the editor of Food and Chemical Toxicology from Dr. Keith Cooper of Rutgers University regarding the Tardiff et al. (2009) paper on risk assessment of PFOA in drinking water. The response from Drs. Tardiff and Carson is also attached. These letters can also be found online at the Food and Chemical Toxicology website.

Please feel free to call me if you would like to discuss the information presented in these letters.

Thank you! Gloria



Tardiff Carson letter published online 20Apr10.pdf



Cooper letter published online 19Apr10.pdf

"Heike Weil" <weil@hs-fresenius.de>

05/20/2010 09:45 AM

To weil

СС

bcc

Subject 3nd Announcement for 2nd International Workshop / Fluorinated Surfactants : New Developments

# 2<sup>nd</sup> International Workshop Fluorinated Surfactants : New Developments

Idstein, Germany • June 17-19, 2010

http://pft.hs-fresenius.de/

.....

**REGISTER NOW** 

\_\_\_\_\_

#### **CONFERENCE THEMES**

Synthesis and application of new fluorinated surfactants

- Improved application
- Environmental and toxicological characteristics
- Improved degradation potential
- Labelled compounds suitable for metabolism and other environment

### Analysis and fate

- Modern analytic instrumentation
- Applications of modern mass spectrometric techniques
- Structure elucidation
- Detection of trace chemicals at very low concentrations
- Identification of unknown compounds as transformation products of photolysis and hydrolysis or biodegradation
- Monitoring the environmental processes and their global distribution

### Human exposure, toxicology, ecotoxicology

- Environmental persistence of perfluorinated compounds
- Toxicological properties of fluorinated substances
- Various routes of human and environmental exposure
- Mechanisms of e.g. C6 and C4 toxicology.

### (Risk) Assessment and Regulation

- Latest developments in the field of assessment, eco labelling and regulation

#### PLENARY SPEAKER

Ian Cousins, ITM, Stockholm University, S

- Global sources and fate modelling of PFC

You will find the final programme with the speakers and the titles of their oral presentations attached.

Round table discussion

C. Schulte, UBA, D; R.C. Buck, DuPont Surface Protection Solutions, US; and others

#### POSTER PRESENTATIONS

A total of 34 posters will represent a wide range of actual research.

### ABSTRACT BOOK

The complete abstract book is available on our website and to download under <a href="http://pft.hs-fresenius.de/index.php/abstract-book">http://pft.hs-fresenius.de/index.php/abstract-book</a>

### CONFERENCE REGISTRATION

Registration is now open. Register by May 31, 2010. Special reduced registration fees are available for students.

http://pft.hs-fresenius.de/index.php/registration

-----

2<sup>nd</sup> International Workshop Fluorinated Surfactants: New Developments is organized and sponsored by University of Applied Sciences Fresenius, German Research Foundation (DFG), Water Chemistry Society - Division of the German Chemical Society, Division of Detergent Chemistry of the German Chemical Society, DuPont, Campro Scientific GmbH.

Conference Chair

Thomas P. Knepper, University of Applied Science Fresenius, Germany

For further information visit: <a href="http://pft.hs-fresenius.de/">http://pft.hs-fresenius.de/</a> or contact Heike Weil at weil@hs-fresenius.de

-----

Data Protection Notice:

If you do not wish to receive any further information, you can send us an email to be unsubscribed from the mailing list.

Sorry in case of multiple mailings. But please feel free to transfer this mail to all your colleagues who may be interested to participate and communicate!



СС

bcc

### Subject PFAA Days poster

Hi Laurence,

Hope everything is going well for you since PFAA Days! Sorry about the lateness in sending this poster, but this month has been super busy with the university closed for the G20 last week!

Let me know if you need anything else!

Cheers,



Holly PFAA III Poster.pdf

"Linda Aller"
<|aller@bennettandwilliams.co

To Cathy Fehrenbacher

m>

03/17/2010 04:37 PM

bcc

СС

Subject City of Cincinnati PFOA Data

Cathy:

I was reading the March 3, 2010 USEPA Comments to DuPont on the latest MOU product. On page 7 of that document, elevated PFOA concentrations sampled in the Cincinnati Water Works are referenced. Can you refer me to the source of the data and concentrations?

Thanking you in advance.

Linda Aller

Linda Aller

Bennett & Williams

98 County Line Road West, Suite C

Westerville, OH 43082

(614)882-9122 ext. 135





winmail.dat

message body.rtf

"Linda Aller"
<laller@bennettandwilliams.co
m>

CC

1111-

05/25/2010 04:19 PM

bcc

Subject ORSANCO report

To Laurence Libelo

Laurence:

Thanks for the heads up and the copy.

Linda

Linda Aller

Bennett & Williams

98 County Line Road West, Suite C

Westerville, Ohio 43082

office 614-882-9122 extension 135

cell 614-361-0153





winmail.dat

message\_body.rtf

"Linda Aller" <laller@bennettandwilliams.co m>

03/02/2010 08:30 AM

To Laurence Libelo

cc "Bob Griffin"

bcc

Subject Little Hocking Raw Water

#### Laurence:

In response to your request during our telephone conversation yesterday, attached please find a copy of the latest summary of results for the raw water samples collected by DuPont where the raw water enters the GAC Treatment system at the Little Hocking Water Association. This document is dated February 16, 2010 and contains other analytical information for the Little Hocking system as well. Table 1 of this document contains results of the biweekly sampling conducted by DuPont. The samples labeled "PT" are "Pretreatment" or "Raw Water". These results are a composite of the wells that are delivering water to the system at the time the samples are collected.

These same results were graphed last year and distributed to the Peer Consultation Panel in March 2009. We have attached an updated graph created from all the available data in this chart for the time period 11/2/07 through 12/28/09. Please note that this data started when the GAC treatment plant became operational. As you can see, the trend is still upward.

As we discussed, this document is publicly available at the Ohio EPA.

If you have questions, please let me know.

Linda

Linda Aller

Bennett & Williams

98 County Line Road West, Suite C

Westerville, OH 43082

(614)882-9122 ext. 135

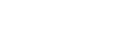
cell (614)361-0153



winmail.dat message body.rtf



2-16-10 LHWA APFO and PFOA Results.pdf



Trend analysis.pdf

<steve.williams@epa.state.oh. us>

03/31/2010 12:32 PM

Subject Fwd: Recent News Article concerning C-8

Here is Sarah's email.

Steven E. Williams
Environmental Manager
Ground Water Program
Ohio EPA, SE District
2195 Front St.
Logan, Ohio 43138
ph. (740) 380-5221
fax. (740) 385-6490
steve.williams@epa.state.oh.us

\_\_\_\_\_

Ohio Environmental Protection Agency
This communication and any response to it
may constitute a public record and thus may be
publicly available to anyone who requests it.

-----

----- Message from "Sarah Wallace" <sarah.wallace@epa.state.oh.us> on Tue, 30 Mar 2010 10:15:33 -0400 -----

CC

bcc

"Janet Barth" <janet.barth@epa.state.oh.us>, "Jeff Davidson"

To: <Jeff.Davidson@epa.state.oh.us>, "Mike Baker" <Mike.Baker@epa.state.oh.us>,

"Steve Williams" < steve.williams@epa.state.oh.us>

"Mariano Haensel" <mariano.haensel@epa.state.oh.us>, "Todd Kelleher"

cc: <Todd.Kelleher@epa.state.oh.us>, "Debbie Metz"

<Debbie.Metz@gcww.cincinnati-oh.gov>

Subject Recent News Article concerning C-8

Hi all,

I think I've figured out what's going on. Attached is the letter sent from USEPA to DuPont on March 3, 2010 that was referenced in the recent news articles. It is a response to comments as part of the ongoing negotiations to put together the Phase III Work Plan under the MOU.

The letter references the need to perform additional surface water sampling around the Parkersburg site including the Ohio River. They are suggesting that the distance sampled downstream previously may not be enough for a thorough delineation.

I spoke with Christopher Impellitteri, Ph.D. at the USEPA Cincinnati Office about some proposed monitoring they want to perform at the Cincinnati Water Works. That office is in the planning phase of a much larger "emerging contaminants" sampling program that will include, among other things, PFOA & PFOS. They are looking more for daily/weekly/yearly variations in concentrations on the river based on routine operations of all upstream sources.

As far as I can tell, these two proposed sampling programs are NOT related. They might be happening at nearly the same time but for much different purposes.

Please give me a call if you want to know any more specifics about this but I wanted to make sure everyone at least had the basics.

Sarah Wallace



USEPA Letter to DuPont 3-3-10.pdf

"Swertfeger, Jeff"
<Jeff.Swertfeger@gcww.cincin
nati-oh.gov>

03/18/2010 08:48 AM

To laller

cc Laurence Libelo, "Metz, Debbie"

bcc

Subject FW: PFOA data

Linda,

My name is Jeff Swertfeger and I am an Assistant Superintendent of Water Quality at the Greater Cincinnati Water Works. I was asked to forward to you the data that we have on PFOA in the Ohio River. We have tested a few times and attached is the data from our testing. Please let me know if you have any questions or we can be of further assistance. I can be reached by e-mail or at (513)624-5608.

Thank you.



miller pfoa data.xls

Greg Fritz/DC/USEPA/US

To Laurence Libelo

02/22/2010 08:20 AM

CC

bcc

Subject Re: Dupont cont'd use of C8

Dr. Gregory Fritz USEPA/OPPTS/OPPT/EETD Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

[Deliveries to: 1201 Constitution Ave., NW EPA East (ICC) Building Cube 5133K Washington, DC 20460]

202-564-8583 (direct) 202-564-8740 (branch)

### 202-564-8679 (fax)

### ---- Forwarded by Greg Fritz/DC/USEPA/US on 02/22/2010 08:20 AM -----

From: Greg Fritz/DC/USEPA/US
To: libelo.laurence@epa.gov
Date: 11/17/2009 02:02 PM
Subject: Re: Dupont in Pasagula. MS

### Go to www.dupont.com

in the search dupont box type "bob buck" & hit button

up comes this pdf file from "textiledyer website"



see pdf textile\_dyer\_1\_30\_09.pdf

Dr. Gregory Fritz USEPA/OPPTS/OPPT/EETD Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

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Laurence Libelo Where did the Bob Buck statement co... 11/17/2009 10:37:27 AM

From: Laurence Libelo/DC/USEPA/US
To: Greg Fritz/DC/USEPA/US@EPA

Date: 11/17/2009 10:37 AM
Subject: Re: Dupont in Pasagula. MS

Where did the Bob Buck statement come from?

Greg Fritz It's Pascagoula MS First Chemical Cor... 11/12/2009 09:16:06 AM

Greg Fritz/DC/USEPA/US

12/02/2009 08:45 AM

To Mark Garvey

cc Cathy Fehrenbacher, David Lynch, Laurence Libelo, Michael Bellot, Tony Ellis

Subject Re: Fw: MPI Revised Characterization Cost Estimate



GF notes 09-106398 SEP Characterization\_rev1.doc



GF notes 09-106398 SEP\_Characterization\_rev2.doc

Dr. Gregory Fritz USEPA/OPPTS/OPPT/EETD Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

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202-564-8583 (direct) 202-564-8740 (branch) 202-564-8679 (fax)

Mark Garvey Please take a look at the new estimates... 12/01/2009 09:11:29 AM

From: Mark Garvey/DC/USEPA/US

To: David Lynch/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Cathy

Fehrenbacher/DC/USEPA/US@EPA, Michael Bellot/DC/USEPA/US@EPA

Cc: Tony Ellis/DC/USEPA/US@EPA, Greg Fritz/DC/USEPA/US@EPA

Date: 12/01/2009 09:11 AM

Subject: Fw: MPI Revised Characterization Cost Estimate

Please take a look at the new estimates and let me know what you think. DuPont would like a call tomorrow.

#### Mark

\_\_\_\_\_

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement Garvey.Mark@epa.gov

NOTE: This email and its attachments may contain confidential information, attorney-work product, enforcement sensitive material or privileged information.

### ----- Forwarded by Mark Garvey/DC/USEPA/US on 12/01/2009 09:09 AM -----

From: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

To: Mark Garvey/DC/USEPA/US@EPA

Cc: David Lynch/DC/USEPA/US@EPA, Andrea V Malinowski

<Andrea.V.Malinowski@USA.dupont.com>, Robert C Buck <Robert.C.Buck@USA.dupont.com>,

Robert J Tucker < Robert. J. Tucker@USA.dupont.com >

Date: 12/01/2009 08:46 AM

Subject: MPI Revised Characterization Cost Estimate

#### Mark:

Could you please suggest a time for a conference call with MPI? Wednesday or Friday works best for me. I'm attaching their revised cost estimates. They provided two estimates:

Proposal 09-106398 SEP Characterization rev 1 is the same quote that we have been discussing since October. When MPI started modifying it, they found a major oversight on their part related to the spiking study total cost. The cost of \$81k only applied to one analysis method. As estimated in the method validation cost (provided in the box above the spiking study on the quote), 10 methods may be needed to analyze all 21 compounds. The \$81k should have been multiplied by 10 which results in a total cost of \$810k for the spiking study. This brings the bottom line to \$1,253,450, which is well above the \$524,450 on the initial proposal dated 10/20/09.

Proposal 09-106398 SEP Characterization rev 2 includes the requested Washington-based extraction procedure. As you know, this process and the resulting additional samples is substantially more work than the extractions that MPI initially quoted. The bottom line on this quote is \$3,762,790. Three times higher, but 5 times more work in terms of sample analysis.

MPI would like to discuss this with DuPont, but I think it's best to have EPA on the phone as well.

FYI, this quote also includes the cost for the Wickbold Torch fluoride determination. MPI is still awaiting the cost for the weight percent of total carbon.

(See attached file: 09-106398 SEP Characterization\_rev1.doc)(See attached file: 09-106398 SEP\_Characterization\_rev2.doc)

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager - DCSE Technology
DuPont Chemical Solutions Enterprise
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
Fax 302-992-4094

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formally notified that any use, copying or distribution of this e-mail, in whole or in part, is strictly prohibited. Please notify the sender by return e-mail and delete this e-mail from your system. Unless explicitly and conspicuously designated as "E-Contract Intended", this e-mail does not constitute a contract offer, a contract amendment, or an acceptance of a contract offer. This e-mail does not constitute a consent to the use of sender's contact information for direct marketing purposes or for transfers of data to third parties.

Francais Deutsch Italiano Espanol Portugues Japanese Chinese Korean

http://www.DuPont.com/corp/email\_disclaimer.html [attachment "09-106398 SEP Characterization\_rev1.doc" deleted by Greg Fritz/DC/USEPA/US] [attachment "09-106398 SEP\_Characterization\_rev2.doc" deleted by Greg Fritz/DC/USEPA/US]

Greg Fritz/DC/USEPA/US

12/18/2009 11:18 AM

To Mark Garvey

cc David Lynch, libelo.laurence, John Washington

bcc

Subject Re: Fw: DuPont/MPI Characterization Assistance Q's

I shared my response with Dave L and read John W responses I assume you and Dave will discuss with DD/MPI on Monday's conference call that I'll miss.

Dr. Gregory Fritz USEPA/OPPTS/OPPT/EETD Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

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202-564-8583 (direct) 202-564-8740 (branch) 202-564-8679 (fax)

Fro Mark Garvey/DC/USEPA/US

m:

To: Robert J Tucker <robert.j.tucker@usa.dupont.com></robert.j.tucker@usa.dupont.com>
Cc: Andrea V Malinowski <andrea.v.malinowski@usa.dupont.com>, Tony Ellis/DC/USEPA/US@EPA, Cathy Fehrenbacher/DC/USEPA/US@EPA, Michael Bellot/DC/USEPA/US@EPA, David Lynch/DC/USEPA/US@EPA, Greg Fritz/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA  Dat 11/10/2009 04:33 PM e: Su Fw: DuPont/MPI Characterization Assistance bje ct:</andrea.v.malinowski@usa.dupont.com>
Bob:  Below is information we discussed on the conference call last week. EPA believes this will help with the

Characterization of the 2 variants ("Purified Fluorotelemer Products" and the "Lab-scale Synthesized

Please call me or email me if you have any questions.

Thank You, Mark

Fluorotelemer Products") by MPI.

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement Garvey.Mark@epa.gov

NOTE: This email and its attachments may contain confidential information, attorney-work product, enforcement sensitive material or privileged information.

---- Forwarded by Mark Garvey/DC/USEPA/US on 11/10/2009 04:27 PM -----

\_\_\_\_\_\_

### DRAFT LANGUAGE FOR DUPONT/MPI

EPA has developed the following information to assist DuPont and MPI to develop a work plan and cost estimate for the characterization of fluorotelomer products for the DuPont SEP. This information is not intended to be prescriptive, but rather to identify elements EPA believes are important and necessary components of an acceptable work plan.

EPA has developed this approach with the central objectives of minimizing volatilization losses and characterizing homogeneous phases.

### Sequential extraction with MTBE

Perform triplicate series of extractions for each sparged commercial fluorotelomer product and low residual commercial fluorotelomer product measuring analytes in each extract once. That will be 2 variants of all 9 (A - D series) products in triplicate analyzed one time each for neutrals and acids (LC plus GC methods) ==> 54 samples times 2 times the number of extractions plus the MTBE cap + aq. layer in MTBE (see below)

- 1. If the materials to be characterized are stabilized aqueous dispersions start with a known mass of suspension in a vial.
- 2. Add more MTBE than can dissolve in the suspension so that MTBE floats on top of the suspension -- effectively a capping trap.
- 3. Add salt (possibly in solution), tetrabutylammonium -hydrogen sulfate (TBAHS), sonicate.
- 4. MTBE which should be homogeneous; this is sample (a) capping MTBE for residuals [neutrals and PFOA]
- 5. Draw a measured sample from the aqueous phase into a syringe with the needle stuck thru the MTBE cap into the bulk aqueous phase and dissolve this aqueous rich sample (b) in MTBE for analysis; analyze the MTBE samples (a) & (b)
- 6. Collect any solid and attempt to dissolve it in MTBE for analysis.
- 7. Repeat sequence above for second MTBE extraction on remaining solids from step 6
- 8. Separately analyze 6) & 7) for residuals [neutrals and PFOA]
- 9. Repeat sequence above for 3rd MTBE extraction + analysis
- 10. Repeat sequence above for 4th MTBE extraction + analysis plot to see if plateau achieved [5th & 6th MTBE extraction unnecessary]
- 11. Repeat sequence above for 5th MTBE extraction + analysis
- 12. Repeat sequence above for 6th MTBE extraction + analysis
- 13. Conduct 1st ACN: Water extraction + separate analysis of each extract
- 14. Repeat for 2nd ACN:Water extraction + separate analysis of each extract

### MTBE Extraction Endpoint

MTBE extraction endpoint is reached when the quantity of residuals in the last extract is <0.1 % of the

total quantity of residuals in all previous extracts. If extraction endpoint has not been reached by 6th extraction, consult with EPA. Once the number of extractions required to reach the extraction endpoint has been established for pilot test group A1, purified fluorotelomer product, then use the same number of extractions for the remaining purified fluorotelomer products and fluorotelomer products of that group (A1, A2, A3). Use the same approach for groups B, C, and D.

### **ACN: Water Extraction Endpoint**

ACN: water extraction endpoint is reached after two sequential ACN: water extractions with separate analysis of extracts. If analysis of second ACN:water extraction yields < 0.1% recovery of all residuals then duplicative and triplicate second ACN:water extracts need not be performed for the remaining series samples.



GF SEP questions for EPA 12-17-09.doc

Greg Fritz/DC/USEPA/US

12/02/2009 11:39 AM

To Toni Krasnic

cc Katherine Sleasman, David Lynch, libelo.laurence, Jasbir Sarna, Cathy Fehrenbacher

bcc

Subject Washington Works monitoring MOU data OPPT-2004-0113 docket document 148.1 Phase II at Dry Run Landfill Groundwater APFO PFOA content

	Active Sampl	ing Locations	
Sample	Date	APFO* (ug/L)	PFOA** (ug/L)
MW-13 (DRMW-13)	10/21/2008	25	24
	7/16/2008	18	17
	4/22/2008	20	19
	1/10/2008	23	22
	10/4/2007	7.8	7.5
	7/18/2007	23	22
	4/10/2007	23	22
	1/11/2007	23	22
	10/10/2006	23	22
	7/16/2006	21.7	20.8
	4/4/2006	27.5	26.4
	1/11/2006	23.4	22.5
	10/4/2005	33.9	32.6
	7/11/2005	21.8	20.7
	5/2/2005	28.3	27.2
	1/25/2005	20.5	19.7
		224 4 4 T	1:

Active 9 Sample Date MW-15 (DRMW-15) 10/21/2008 7/16/2008 4/21/2008 1/11/2008 10/5/2007 10/5/07 (dup 7/18/2007 7/18/07 (dup 4/11/2007 1/11/2007 1/11/2007 (du 10/12/2006 7/13/2006 4/5/2006 1/11/2006 10/4/2005 10/4/05 (dup 7/12/2005 4/26/2005 1/25/2005

Table 5.12

Dry Run Landfill APFO and PFOA in Groundwater
Quarterly MOU Status Report #13

DuPont Washington Works (OPPT-2004-0113)

	Active Sampl	ing Locations	
Sample	Date	APFO* (ug/L)	PFOA** (ug/L)
	Above A-Z	Cone Wells	to very series and the
MW-14 (DRMW-14)	10/20/2008	0.03	0.029
	7/15/2008	0.022	0.021
	4/22/2008	0.026	0.025
	1/11/2008	0.033	0.032
	10/5/2007	0.032	0.031
	7/18/2007	0.028	0.027
	4/11/2007	0.029	0.028
	1/11/2007	0.029	0.028
	10/11/2006	0.035	0.034
	7/13/2006	0.0426	0.0409
	4/3/2006	0.0419	0.0402
	1/11/2006	0.0285	0.0274
	10/4/2005	0.0356	0.0342
	7/11/2005	0.0262	0.0252
	4/29/2005	NQ (<0.05)	NQ (<0.05)
	1/25/2005	NQ (<0.05)	NQ (<0.05)
	11/11/2004	NQ (<0.05)	100

Just an observation: While different monitoring sites have different values for APFO / PFOA content the amount at each site has remained relatively unchanged over a 4 year period that has seen a net reduction [according to the current PFOA stewardship numbers] in PFOA / APFO usage and releases. So the content [whatever that may contain] of the dry run landfill has continued (still continues) to release APFO / PFOA to groundwater at the steady state that it was doing so in 2005. The MW -13 groundwater levels are at 16 - 28  $\,\mu\text{g}$  / L levels {threw out low 7.5 and high 33.9 values}. Another reason to stop adding additional new content to the environmental background levels. This is pretty compelling trend documentation.



Dr. Gregory Fritz USEPA/OPPTS/OPPT/EETD Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

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### Greg Fritz/DC/USEPA/US

12/02/2009 11:40 AM

To Toni Krasnic

cc Katherine Sleasman, David Lynch, libelo.laurence, Jasbir Sarna, Cathy Fehrenbacher

bcc

Subject Washington Works monitoring MOU data OPPT-2004-0113

docket document 148.1 Phase II at Dry Run Landfill

Groundwater APFO PFOA content

Table 5.12

Dry Run Landfill APFO and PFOA in Groundwater
Quarterly MOU Status Report #13

DuPont Washington Works (OPPT-2004-0113)

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Dry Run Landfill APFO and PFOA in Groundwater
Quarterly MOU Status Report #13
DuPont Washington Works (OPPT-2004-0113)

Active Sampling Locations			
Sample	Date	APFO* (ug/L)	PFOA** (ug/L)
MW-13 (DRMW-13)	10/21/2008	25	24
	7/16/2008	18	17
	4/22/2008	20	19
	1/10/2008	23	22
	10/4/2007	7.8	7.5
	7/18/2007	23	22
	4/10/2007	23	22
	1/11/2007	23	22
	10/10/2006	23	22
	7/16/2006	21.7	20.8
	4/4/2006	27.5	26.4
	1/11/2006	23.4	22.5
	10/4/2005	33.9	32.6
	7/11/2005	21.6	20.7
	5/2/2005	28.3	27.2
	1/25/2005	20.5	19.7
	: ::::::::::::::::::::::::::::::::::::	7.44.41	10

	Active Sampling Locations		
Sample	Date	APFO* (ug/L)	
MW-15 (DRMW-15)	10/21/2008	3.7	
	7/16/2008	0.67	
	4/21/2008	3.5	
	1/11/2008	4.4	
	10/5/2007	3.6	
	10/5/07 (dup)	3.2	
	7/18/2007	4.2	
	7/18/07 (dup)	3.7	
	4/11/2007	4.1	
	1/11/2007	4.3	
	1/11/2007 (dup)	3.1	
	10/12/2006	4.8	
	7/13/2006	4.29	
	4/5/2006	5.18	
	1/11/2006	4.84	
	10/4/2005	5.84	
	10/4/05 (dup)	7.43	
	7/12/2005	4.84	
	4/26/2005	5.45	
	1/25/2005	4.02	

Table 5.12

Dry Run Landfill APFO and PFOA in Groundwater
Quarterly MOU Status Report #13

DuPont Washington Works (OPPT-2004-0113)

	Active Sampl	ing Locations	
Sample	Date	APFO* (ug/L)	PFOA** (ug/L)
	Above A-2	Zone Wells	in veneralizations.
MW-14 (DRMW-14)	10/20/2008	0.03	0.029
	7/15/2008	0.022	0.021
	4/22/2008	0.026	0.025
	1/11/2008	0.033	0.032
	10/5/2007	0.032	0.031
	7/18/2007	0.028	0.027
	4/11/2007	0.029	0.028
	1/11/2007	0.029	0.028
	10/11/2006	0.035	0.034
	7/13/2006	0.0426	0.0409
	4/3/2008	0.0419	0.0402
	1/11/2006	0.0285	0.0274
	10/4/2005	0.0356	0.0342
	7/11/2005	0.0262	0.0252
	4/29/2005	NQ (<0.05)	NQ (<0.05)
	1/25/2005	NQ (<0.05)	NQ (<0.05)
	11/11/2004	NQ (<0.05)	100

Just an observation: While different monitoring sites have different values for APFO / PFOA content the amount at each site has remained relatively unchanged over a 4 year period that has seen a net reduction [according to the current PFOA stewardship numbers] in PFOA / APFO usage and releases. So the content [whatever that may contain] of the dry run landfill has continued (still continues) to release APFO / PFOA to groundwater at the steady state that it was doing so in 2005. The MW -13 groundwater levels are at 16 - 28  $\,\mu g$  / L levels {threw out low 7.5 and high 33.9 values}. Another reason to stop adding additional new content to the environmental background levels. This is pretty compelling trend documentation.

Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

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202-564-8583 (direct) 202-564-8740 (branch)



202-564-8679 (fax) MOULAndFlpdf.pdf

# Greg Fritz/DC/USEPA/US

03/31/2010 08:25 AM

To Toni Krasnic, Laurence Libelo

cc Mark Garvey, David Lynch, Cathy Fehrenbacher

bcc

Subject Just an interesting article from the public perspective of what

Dupont wasn't telling shareholders



### SOME HIGHLIGHTS FROM A SHAREHOLDERS RIGHT TO KNOW ARTICLE 2005

"Federal securities laws, including the recently passed Sarbanes-Oxley Act, put a premium on disclosure of material information, and we are concerned that DuPont has not yet provided full disclosure to shareholders on PFOA issues. Although the management reports on litigation in its SEC filings, typically as cases are mid-way, as conditions and evidence have mounted against PFOA, the management has not disclosed the trends and uncertainties that foreshadowed litigation, and regulatory and market risks. Investors would have benefited from knowing, for example, that:

☐ Studies available to DuPont indicated that workers exposed to PFOA could have heightened cholesterol and risk of stroke. In addition, workers at the Washington Works DuPont site in Parkersburg, West Virginia, a facility at which PFOA is used as a processing agent in the production of Teflon®, were found in DuPont's own studies to have higher than normal levels of leukemia, rheumatic heart disease, atherosclerosis and aneurysm, though the company reportedly did not gather the data needed to assess whether there is a link to PFOA exposure.

☐ Testing done on behalf of DuPont beginning in the 1980's showed elevated levels of PFOA in drinking water of communities near its Washington Works facility.

In February 2005, a class action lawsuit settlement was approved by a court. The

suit resulted from the public's exposure to PFOA in water. The settlement will cost the company \$108 million initially, with potential for hundreds of millions in additional liability dependent on an independent panel's evaluations of the potential health impacts of the PFOA exposures. See further discussion below.

Testing of workers and community residents at the Washington Works facility showed heightened levels of PFOA in their blood.

Concerns were expressed by DuPont legal counsel and others, as early as 1984, about the course being taken regarding the management of PFOA issues, and the liability and reputational costs facing the company as a result.

Reported in EPA Draft Risk Assessment, January 2005, p. 16, citing DuPont 2003 Epidemiology surveillance report: Cancer incidence for Washington works site 1959-2001 US EPA AR226-1307"

#### and

"In our opinion, had investors known these facts earlier, they may have differently evaluated the value of company stock, and the propriety of decisions being made by the management during this time period. Such information would have changed the mix of information available to investors, and:

- cast in a different light the decision of DuPont management to begin production of PFOA's ammonium salt, ammonium perfluorooctanoate (APFO) when the leading supplier, 3M, decided to end PFOA production;
- allowed shareholders to anticipate the likelihood of future EPA enforcement actions and liability lawsuits;
- enabled shareholders to anticipate the increasingly hostile market and regulatory climate that DuPont PFOA-based products face today."

#### and

"Better disclosure of the emerging trends as they may affect DuPont markets worldwide is appropriate. In the event that PFOA is restricted or that markets migrate away from the use of products made with or that break down into PFOA, the impact could be substantial. Analysts at JP Morgan have estimated that DuPont's PFOA-related product lines, fluoropolymers and telomers products, contributed about \$1.23 billion to 2003 sales and \$100 million to profit."

Dr. Gregory Fritz USEPA/OPPTS/OPPT/EETD Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

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202-564-8583 (direct) 202-564-8740 (branch) 202-564-8679 (fax)

### Greg Fritz/DC/USEPA/US

03/18/2010 09:15 AM

To Toni Krasnic, Rose Allison

cc David Lynch, Laurence Libelo

bcc

Subject Ciba 10/2009 patent C8 Rf products as clothing protectants



CibaOct2009patent.pdf

Dr. Gregory Fritz USEPA/OPPTS/OPPT/EETD Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

[Deliveries to: 1201 Constitution Ave., NW EPA East (ICC) Building Cube 5133K Washington, DC 20460]

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### Jennifer Seed/DC/USEPA/US

02/23/2010 03:53 PM

To Cathy Fehrenbacher, Laurence Libelo

СС

bcc

Subject don't know if you have seen this



John Washington/ATH/USEPA/US 01/27/2010 04:44 PM

To Laurence Libelo

СС

bcc

Subject Fw: report

John Washington

United States Environmental Protection Agency

National Exposure Research Laboratory

**Ecosystems Research Division** 960 College Station Road

Athens, GA 30606 phone: (706) 355-8227 fax: (706) 355-8202

email: washington.john@epa.gov http://www.epa.gov/athens/

---- Forwarded by John Washington/ATH/USEPA/US on 01/27/2010 04:44 PM -----

Toni Krasnic/DC/USEPA/US From:

John Washington/ATH/USEPA/US@EPA To: Laurence Libelo/DC/USEPA/US@EPA Cc:

01/27/2010 01:15 PM Date:

Re: Fw: report Subject:

Hey John,

Please find it attached.

tk

564.0984



Giesy 3MD ecatur report.pdf

John Washington Hi Toni, Would you know how I can g... 01/27/2010 11:32:33 AM

From: John Washington/ATH/USEPA/US Toni Krasnic/DC/USEPA/US@EPA To:

Date: 01/27/2010 11:32 AM

Subject: Fw: report

Hi Toni,

Would you know how I can get hold of the report listed below?

Thanks for any guidance --John

John Washington United States Environmental Protection Agency National Exposure Research Laboratory **Ecosystems Research Division** 960 College Station Road Athens, GA 30606 phone: (706) 355-8227

fax: (706) 355-8202 email: washington.john@epa.gov http://www.epa.gov/athens/

----- Forwarded by John Washington/ATH/USEPA/US on 01/27/2010 11:31 AM -----

From: Pete Lasier <plassier@usgs.gov>

To: John Washington/ATH/USEPA/US@EPA

Date: 01/27/2010 09:41 AM

Subject: report

#### Hi John,

Do you have or can you get the following report? It apparently documents high PFOS levels in Decatur sediments. If not, I'll have our secretary start to track it down. (I assume these EPA reports are easier for you to get - but maybe not.)

### Pete

Giesy, JP and Newsted, JL (2001). Selected Fluorochemicals in the Decatur, Alabama Area. Prepared for 3M, St Paul, MN. In US EPA Administrative Record AR226-1030A.

Laura Nazef/DC/USEPA/US

To Bradley Grams

03/02/2010 02:09 PM

cc Connie Roberts, Gail Mitchell, Laurence Libelo, Lee Thomas, Toni Krasnic

bcc

Subject Re: PFC Case Studies Request.

### Bradley,

Here is a case study on U.S. efforts to manage long-chain perfluorinated chemicals that we will be adding to the UN Commission on Sustainable Development case study database.



US EPA PFCs Case Study CSD 2 24 10.doc

### Regards,

Laura Nazef
U.S. Environmental Protection Agency
Office of Pollution Prevention and Toxics
Pollution Prevention Division
Phone: +1 (202) 564-7523
Fax: +1 (202) 564-8899
nazef.laura@epa.gov

Bradley Grams Hi Toni: Thanks! That would be great a... 03/02/2010 12:00:40 PM

From: Bradley Grams/R5/USEPA/US

To: Toni Krasnic/DC/USEPA/US@EPA

Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Laura Cc:

Nazef/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Lee

Thomas/R4/USEPA/US@EPA

03/02/2010 12:00 PM Date:

Re: PFC Case Studies Request. Subject:

Hi Toni:

Thanks! That would be great as a sample.

Some Regions are looking for case studies based on recent regional activity, for guidance on how to approach PFC issues from RCRA, SDWA and CERCLA perspectives. So, these would be more of a "using the [CERCLA/RCRA/SDWA] tools at your disposal" type of case study. So, for example, I could take the different approaches Regions have taken, and put them into a handbook of examples for Regions and HQ to look at. That could be helpful for Regions in which a PFC issue is identified.

Maybe take the UNEP case study (does OW have one too?) and add on CERCLA, RCRA and SDWA examples from Regions II-V for application examples? I'm not sure, but we could talk about that.

Thanks!

Cheers,

Bradley Randall Grams, B.Sc., B.A.

Environmental Scientist

OPPTS Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

Land and Chemicals Division

Chemicals Management Branch, Toxics Section

77 West Jackson Boulevard (LC-8J)

Chicago, IL 60604

PHONE: (312) 886-7747 FAX:

(312) 697-2527

E-MAIL: grams.bradley@epa.gov

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Toni Krasnic	I'm not sure what type of a case study y	03/02/2010 10:53:58 AM
Bradley Grams	Hi Lee: On the case study productions,	03/02/2010 11:51:19 AM

Laurence Libelo/DC/USEPA/US

03/26/2010 04:35 PM

To Toni Krasnic

cc Greg Fritz, Laurence Libelo, David Lynch, Cathy Fehrenbacher, Diane Sheridan, Katherine Sleasman

bcc

Subject Fw: 8(e) notice from 3M: Fluoropolymer Generation Test

### Method Development Experiment

So the net result of this work after 5 years is that they think they can now measure PFOA?

It looks like the industry testing is showing that fluoropolymers are degrading to form monomers. Based on this I am not sure what it is possible to say.

#### Laurence

----- Forwarded by Laurence Libelo/DC/USEPA/US on 03/26/2010 04:22 PM -----

From: Toni Krasnic/DC/USEPA/US

To: Greg Fritz/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, David

Lynch/DC/USEPA/US@EPA

Cc: Cathy Fehrenbacher/DC/USEPA/US@EPA, Diane Sheridan/DC/USEPA/US@EPA, Katherine

Sleasman/DC/USEPA/US@EPA

Date: 03/26/2010 03:30 PM

Subject: 8(e) notice from 3M: Fluoropolymer Generation Test Method Development Experiments

Hi,

We just received this study from 3M. FMG (Mark Greenwood is the lead) intends to come in April to discuss the study. Please let me know what you think and whether we need to schedule a meeting to discuss.

Thanks,

tk 564.0984



Lee Thomas/R4/USEPA/US

To Laurence Libelo

03/02/2010 01:42 PM

cc bcc

Subject Fw: Dalton 308 Response Dec 23 2009 Progress Report,

Deer Sample Results. Have copies of Dalton letters to

private residence also

### Laurence,

I have just forwarded these results to Gail. She wants the website updated and this will be high on the list for the update. However, the person who does the website is out on medical leave so it may be several weeks before it is available on the website.

Lee Thomas thomas.lee@epa.gov 404.562.9786 Ground-Water Hydrologist Water Protection Division United States Environmental Protection Agency, Region 4 61 Forsyth Street Atlanta, GA 30303

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----- Forwarded by Lee Thomas/R4/USEPA/US on 03/02/2010 01:40 PM -----

From: Michael Hom/R4/USEPA/US

To: Connie Roberts/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA, Lee

Thomas/R4/USEPA/US@EPA, Mike Neill/R4/USEPA/US@EPA, Rebecca Fauver/R4/USEPA/US@EPA, WilliamT Jones/R4/USEPA/US@EPA, William Bush/R4/USEPA/US@EPA, Sean Ireland/R4/USEPA/US@EPA, Stacey

Haire/R4/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA

Date: 01/12/2010 12:38 PM

Subject: Dalton 308 Response Dec 23 2009 Progress Report, Deer Sample Results. Have copies of Dalton

letters to private residence also

### FYI.

Also, Dalton provided copies of their letter to the residences of well results. I recall in our last telephone conference that we requested these letters, but do not remember who exactly asked for them. Who shall I forward these letters to?



Dalton 308 Response Dec 23 2009 Transmittal Letter Monthly Progress Report and of Deer Sample Results.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment E.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment D.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment C.PDF



Dalton 308 Response Dec 23 2009 Transmittal of Deer Sample Results Attachment B.PDF

Marc Mills/CI/USEPA/US

03/10/2010 10:28 PM

- To Carolyn Acheson, Dennis Timberlake, Andrew Lindstrom, Mark Strynar, John Washington
- CC Shoji Nakayama, Francis. Elaine, Ross Highsmith, Laurence Libelo

bcc

Subject SERDP proposal on FCs

FYI. Here is the proposal that went in to DoD's SERDP on AFFF associated soil and gw contamination. Also, for the record, this simply would not have happened without a Herculean effort by Shoji. With EPA taking the lead on this, there was significantly more work than being a co-PI.

It is done and I think we stand a good chance.



Thanks to all that contributed.

Marc	
Marc A. Mills. Ph.D.	

United States Environmental Protection Agency Office of Research and Development National Risk Management Research Laboratory 26 W. Martin Luther King Dr. Cincinnati, OH 45268

Tel 513.569.7322 Fax 513.569.7620 mills.marc@epa.gov

# Marc Mills/CI/USEPA/US

05/20/2010 10:04 AM

To Shoji Nakayama, Lazorchak.Jim, Andrew Lindstrom, Mark Strynar, Christopher Lau, Zhishi Guo, Carolyn Acheson, John Washington, Laurence Libelo, Christopher Impellitteri, Kathleen Schenck, Heath Mash, emery

СС

bcc

Subject Fw: 3nd Announcement for 2nd International Workshop / Fluorinated Surfactants: New Developments

FYI in case you had not seen this one.

Marc

----Marc A. Mills, Ph.D.

United States Environmental Protection Agency Office of Research and Development National Risk Management Research Laboratory 26 W. Martin Luther King Dr. Cincinnati, OH 45268

Tel 513.569.7322 Fax 513.569.7620 mills.marc@epa.gov From: "Heike Weil" <weil@hs-fresenius.de>

To: <weil@hs-fresenius.de> Date: 05/20/2010 09:47 AM

Subject: 3nd Announcement for 2nd International Workshop / Fluorinated Surfactants : New Developments

## 2<sup>nd</sup> International Workshop Fluorinated Surfactants : New Developments

Idstein, Germany • June 17-19, 2010

http://pft.hs-fresenius.de/

\_\_\_\_\_

### **REGISTER NOW**

-----

#### **CONFERENCE THEMES**

Synthesis and application of new fluorinated surfactants

- Improved application
- Environmental and toxicological characteristics
- Improved degradation potential
- Labelled compounds suitable for metabolism and other environment

### Analysis and fate

- Modern analytic instrumentation
- Applications of modern mass spectrometric techniques
- Structure elucidation
- Detection of trace chemicals at very low concentrations
- Identification of unknown compounds as transformation products of photolysis and hydrolysis or biodegradation
- Monitoring the environmental processes and their global distribution

### Human exposure, toxicology, ecotoxicology

- Environmental persistence of perfluorinated compounds
- Toxicological properties of fluorinated substances
- Various routes of human and environmental exposure
- Mechanisms of e.g. C6 and C4 toxicology.

#### (Risk) Assessment and Regulation

- Latest developments in the field of assessment, eco labelling and regulation

### PLENARY SPEAKER

Ian Cousins, ITM, Stockholm University, S

- Global sources and fate modelling of PFC

You will find the final programme with the speakers and the titles of their oral presentations attached

Round table discussion

C. Schulte, UBA, D; R.C. Buck, DuPont Surface Protection Solutions, US; and others

#### POSTER PRESENTATIONS

A total of 34 posters will represent a wide range of actual research.

#### ABSTRACT BOOK

The complete abstract book is available on our website and to download under <a href="http://pft.hs-fresenius.de/index.php/abstract-book">http://pft.hs-fresenius.de/index.php/abstract-book</a>

#### CONFERENCE REGISTRATION

Registration is now open. Register by May 31, 2010. Special reduced registration fees are available for students.

http://pft.hs-fresenius.de/index.php/registration

2<sup>nd</sup> International Workshop Fluorinated Surfactants: New Developments is organized and sponsored by University of Applied Sciences Fresenius, German Research

Foundation (DFG), Water Chemistry Society - Division of the German Chemical Society, Division of Detergent Chemistry of the German Chemical Society, DuPont, Campro Scientific GmbH.

Conference Chair

Thomas P. Knepper, University of Applied Science Fresenius, Germany

For further information visit: <a href="http://pft.hs-fresenius.de/">http://pft.hs-fresenius.de/</a> or contact Heike Weil at weil@hs-fresenius.de

\_\_\_\_\_

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Mark Garvey/DC/USEPA/US

To Cathy Fehrenbacher, Michael Bellot

01/16/2010 06:28 PM

cc David Lynch, Laurence Libelo, Tony Ellis

bcc

Subject Fw: ILSI's Updated the SEP Timeline to fit - Note it has

Panel Acceptance as 1/15

Cathy & Mike,

ILSI's needs to know of the changes in scope of the project.

It is also worth noting that ILSI uses 1/15/10 as Panel Acceptance date when the ILSI letter to OPPT was dated 1/13. I guess they gave 2 days for snail mail even though it was sent by email.

Since it is a fee for service contract, we need to make sure ILSI's services are monitored closely. Would you like me to send an email to DuPont making sure they let ILSI know that there is a substantial change in the scope of work and that could impact the ILSI services?

I don't understand what page 2 of the ILS attached timeline is telling me. Do you? If not, I want to ask Robert Tucker to explain it so there's no confusion.

Thanks, Mark

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement Garvey.Mark@epa.gov

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----- Forwarded by Mark Garvey/DC/USEPA/US on 01/16/2010 06:15 PM -----

From: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

To: Mark Garvey/DC/USEPA/US@EPA

Cc: Andrea V Malinowski < Andrea. V. Malinowski@USA.dupont.com>, Robert J Tucker

<Robert.J.Tucker@USA.dupont.com>

Date: 01/15/2010 11:21 AM

Subject: Re: Have you Updated the SEP Timeline to fit with the current schedules?

Mark:

We'll need to figure out how to sync the biodeg and characterization lab timelines to the ILSI timeline attached. ILSI expects to have the first analytical report by March 8th for review with the panel. ILSI is not aware of the scope changes we have discussed with the labs. Do you know when we can expect EPA's approval of the MPI characterization contract? Thanks.

Regards, Bob

Robert J. Tucker Regulatory Programs Manager DuPont Chemicals and Fluoroproducts Barley Mill Plaza 23-2233 4417 Lancaster Pike Wilmington, DE 19805 Office 302-992-5803 Fax 302-992-4094

(See attached file: Biodegradation SEP Panel Admin Timeline - 1-15-10.pdf)

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Biodegradation SEP Panel Admin Timeline - 1-15-10.pdf

Mark Garvey/DC/USEPA/US

12/10/2009 03:44 PM

- To Cathy Fehrenbacher, Michael Bellot, Greg Fritz
- cc David Lynch, Laurence Libelo

bcc

Subject Fw: Please Review today -- FINAL DRAFT of Revised Scope Mod for Wildlife - review before formal submission for approval

Cathy and Greg:

The attachment looks to me like DuPont put all of Greg's ideas in the Scope of Work. I want to make sure that footnote 3 is fine with you.

If everything looks good, then we are ready to tell them the K is ready for Wildlife. Please let me know as soon as possible.

Thanks, Mark

Mark Garvey
Attorney
202-564-4168
US EPA
Office of Civil Enforcement
Garvey.Mark@epa.gov

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#### ---- Forwarded by Mark Garvey/DC/USEPA/US on 12/10/2009 03:41 PM -----

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To: Mark Garvey/DC/USEPA/US@EPA

Cc: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

Date: 12/10/2009 03:37 PM

Subject: Revised Scope Mod for Wildlife - review before formal submission for approval

#### Mark --

I revised the Scope Modification per your email of earlier today.

In the interest of progressing with finalizing the contract, I attach below the revised document for EPA review before DuPont formally submits it for approval. The new language is highlighted in the document. I assumed the other changes in the 12.09.09 version were acceptable so removed the highlighting around that language.

I do have one comment (as usual) -- I included directly in the Modification, as a footnote, the example provided by EPA. I thought it would serve to provide clarity for Wildlife and Wildlife would have it in one document (as opposed to sending a separate email to Wildlife). I can just as easily remove the footnote and just provide the example in an email. Note that I did do some word-smithing to the example, with no intent to change substance, so appreciate it if EPA could review it to make sure it is accurate.

Once we hear back from EPA that there are no other changes for this document, Bob Tucker will make the formal submission for EPA approval.

Thanks.

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Draft 12.10.09 v2 - Modification to 07.28.09 Scope.doc

Mark Garvey/DC/USEPA/US

To David Lynch

05/10/2010 03:23 PM

cc

bcc

Subject Fw: SEP 1Q2010 Progress Report

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement Garvey.Mark@epa.gov

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From: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

To: Mark Garvey/DC/USEPA/US@EPA

Cc: Tony Ellis/DC/USEPA/US@EPA, Andrea V Malinowski <Andrea.V.Malinowski@USA.dupont.com>,

Robert J Tucker < Robert. J. Tucker@USA.dupont.com>

Date: 04/29/2010 11:13 AM

Subject: SEP 1Q2010 Progress Report

#### Mark:

Please find the attached SEP 1Q2010 Progress Report. The official copy is being sent to Tony Ellis via FEDEX today. If you have any questions, please let me know. Thanks.

(See attached file: Content letter CD-2010-4 1Q2010 Progress Report.pdf) (See attached file: 1Q2010 Progress Report Cover Letter.pdf)(See attached file: 1Q2010 Progress Report.pdf)

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager
DuPont Chemicals and Fluoroproducts
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
Fax 302-992-4094

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Content letter CD-2010-4 1Q2010 Progress Report.pdf 1Q2010 Progress Report Cover Letter.pdf 1Q2010 Progress Report.pdf

Mark Garvey/DC/USEPA/US

01/04/2010 04:20 PM

To David Lynch, Cathy Fehrenbacher, Greg Fritz, Laurence Libelo

cc Michael Bellot

bcc

Subject Fw: Revised Scope Modifications & Price Schedule for MPI -EPA Approval of Contract for DuPont SEP Welcome Back Cathy, David, Laurence and Greg:

If EPA is O.K. with the modified Scope and the new Price Schedule attached then we can let DuPont know that their contract w/ MPI is approved for SEP work. Please let me know whether you find these O.K. or if you have any concerns.

Thanks, Mark

\_\_\_\_\_

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement Garvey.Mark@epa.gov

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To: Mark Garvey/DC/USEPA/US@EPA

Cc: Andrea V Malinowski < Andrea. V. Malinowski @USA. dupont.com >, Robert J Tucker

<Robert.J.Tucker@USA.dupont.com>

Date: 01/04/2010 11:48 AM

Subject: Revised Scope Mod for MPI - EPA Approval of Contract with MPI

#### Mark:

Happy New Year! I hope you enjoyed your time off. I'm getting back into the swing of things w/r/t to the SEP. My first priority is to get the MPI (characterization lab) contract executed. The conference call we had with MPI before the holidays did not affect any aspect of the contract EPA approved in October. The only updates to that October approval are the revised cost estimate and revised scope of work. Since neither of those documents contain CBI, I am sending them along to you to help expedite EPA review and approval. If EPA approves these changes, I can add the date of EPA's approval to the scope modification and quickly execute the contract with MPI. Should I also do a formal submission to Tony Ellis, or can you use this email as the submittal for approval? Thanks.

(See attached file: 12.10.09a Draft - Mod to MPI Scope of Work.doc)(See attached file: MPI CW199856 Price Schedule.pdf)(See attached file: Mark Garvey Email 11-10-09.pdf)

Regards, Bob

Robert J. Tucker

Regulatory Programs Manager

DuPont Chemicals and Fluoroproducts Barley Mill Plaza 23-2233 4417 Lancaster Pike Wilmington, DE 19805 Office 302-992-5803 Fax 302-992-4094

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12.10.09a Draft - Mod to MPI Scope of Work.doc MPI CW199856 Price Schedule.pdf Mark Garvey Email 11-10-09.pdf

#### Mark Garvey/DC/USEPA/US

03/18/2010 04:10 PM

To David Lynch, Cathy Fehrenbacher, Greg Fritz, Laurence

Libelo

cc Michael Bellot

bcc

Subject Fw: \$8.8 Million Total Cost on Wildlife Work Plan Biodegredation Testing

David, Greg, Laurence and Cathy:

This appears to cost \$1.9 million to get thru 4 pilot studies. Then definitive studies are an additional \$6.8 million.

Is this correct?

Mark

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement Garvey.Mark@epa.gov

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To: Mark Garvey/DC/USEPA/US@EPA

Cc: Andrea V Malinowski < Andrea. V. Malinowski @USA. dupont.com>

Date: 03/18/2010 09:38 AM Subject: Wildlife Work Plan

#### Mark:

EPA should have received the attached work plan in electronic (word and pdf) and hard copy form yesterday for review and approval.

(See attached file: Biodegradation SEP Work Plan.pdf)

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager
DuPont Chemicals and Fluoroproducts
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
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Biodegradation SEP Work Plan.pdf

Mark Garvey/DC/USEPA/US

01/29/2010 09:21 PM

To David Lynch, Cathy Fehrenbacher, Greg Fritz, Laurence Libelo

cc Michael Bellot, Tony Ellis

bcc

Subject Fw: Application of EPA Analytical Methodology - Wildlife Work Plan \*\*Questions from Wildlife

#### Forwarding message that Wildlife sent

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement Garvey.Mark@epa.gov

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To: Mark Garvey/DC/USEPA/US@EPA

Cc: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

Date: 01/29/2010 10:25 AM

Subject: Application of EPA Analytical Methodology - Wildlife Work Plan

#### Mark:

FYI, we shipped the test substances to MPI Research and Wildlife International yesterday for arrival today.

Attached is a list of questions and comments from Wildlife (WLI) on the analytical methods that EPA provided and that Wildlife is using in the SCAS test. It may be worthwhile to schedule a call to discuss. Once we get EPA's response, WLI should be able to complete the analytical methods section of the SEP work plan.

There are several days and times next week when scientists from WLI and DuPont are available to talk:

Tuesday Feb 2 between 2 and 5 PM Wednesday Feb 3 between 8:30 AM and 5 PM Thursday Feb 4 between 8:30 AM and Noon

If you want Andrea on the call, the best time for her is Tuesday at 3:30 or Wednesday morning. Please let me know what would work best for EPA so I can get back to WLI. Thanks.

(See attached file: 2010\_28\_JAN\_Application of EPA Methodology.doc)

Regards, Bob

Robert J. Tucker Regulatory Programs Manager DuPont Chemicals and Fluoroproducts Barley Mill Plaza 23-2233 4417 Lancaster Pike Wilmington, DE 19805 Office 302-992-5803 Fax 302-992-4094

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2010\_28\_JAN\_Application of EPA Methodology.doc

Mark Garvev/DC/USEPA/US

03/23/2010 10:44 AM

To David Lynch

cc Cathy Fehrenbacher, Laurence Libelo, Michael Bellot, Greg

Fritz

bcc

Subject Fw: SEP 4Q2009 Progress Report - thought this may help

review of Wildlife Int. Work Plan

As of Dec. 31, 2009, \$692,341 was spent. How much can go to Biodegradation?

\_\_\_\_\_

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement Garvey.Mark@epa.gov

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To: Mark Garvey/DC/USEPA/US@EPA

Cc: Tony Ellis/DC/USEPA/US@EPA, Andrea V Malinowski < Andrea.V.Malinowski@USA.dupont.com>,

Robert J Tucker < Robert.J. Tucker@USA.dupont.com>

Date: 01/27/2010 11:34 AM

Subject: SEP 4Q2009 Progress Report

#### Mark:

Please find the attached SEP 4Q2009 Progress Report. The official copy was sent to Tony Ellis via FEDEX today. If you have any questions, please let me know. Thanks.

(See attached file: Content letter CD-2010-3 4Q2009 Progress Report.pdf) (See attached file: 4Q2009 Progress Report Cover Letter.pdf)(See attached file: 4Q2009 Progress Report.pdf)

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager
DuPont Chemicals and Fluoroproducts
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
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Content letter CD-2010-3 4Q2009 Progress Report.pdf 4Q2009 Progress Report Cover Letter.pdf 4Q2009 Progress Report.pdf

Mark Garvey/DC/USEPA/US

12/01/2009 09:11 AM

- To David Lynch, Laurence Libelo, Cathy Fehrenbacher, Michael Bellot
- cc Tony Ellis, Greg Fritz

bcc

Subject Fw: MPI Revised Characterization Cost Estimate

Please take a look at the new estimates and let me know what you think. DuPont would like a call tomorrow.

Mark			

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement Garvey.Mark@epa.gov

NOTE: This email and its attachments may contain confidential information, attorney-work product, enforcement sensitive material or privileged information.

---- Forwarded by Mark Garvey/DC/USEPA/US on 12/01/2009 09:09 AM -----

From: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

To: Mark Garvey/DC/USEPA/US@EPA

Cc: David Lynch/DC/USEPA/US@EPA, Andrea V Malinowski

<Andrea.V.Malinowski@USA.dupont.com>, Robert C Buck <Robert.C.Buck@USA.dupont.com>,

Robert J Tucker < Robert. J. Tucker@USA.dupont.com>

Date: 12/01/2009 08:46 AM

Subject: MPI Revised Characterization Cost Estimate

#### Mark:

Could you please suggest a time for a conference call with MPI? Wednesday or Friday works best for me. I'm attaching their revised cost estimates. They provided two estimates:

Proposal 09-106398 SEP Characterization rev 1 is the same quote that we have been discussing since October. When MPI started modifying it, they found a major oversight on their part related to the spiking study total cost. The cost of \$81k only applied to one analysis method. As estimated in the method validation cost (provided in the box above the spiking study on the quote), 10 methods may be needed to analyze all 21 compounds. The \$81k should have been multiplied by 10 which results in a total cost of \$810k for the spiking study. This brings the bottom line to \$1,253,450, which is well above the \$524,450 on the initial proposal dated 10/20/09.

Proposal 09-106398 SEP Characterization rev 2 includes the requested Washington-based extraction procedure. As you know, this process and the resulting additional samples is substantially more work than the extractions that MPI initially quoted. The bottom line on this quote is \$3,762,790. Three times higher, but 5 times more work in terms of sample analysis.

MPI would like to discuss this with DuPont, but I think it's best to have EPA on the phone as well.

FYI, this quote also includes the cost for the Wickbold Torch fluoride determination. MPI is still awaiting the cost for the weight percent of total carbon.

(See attached file: 09-106398 SEP Characterization\_rev1.doc)(See attached file: 09-106398 SEP\_Characterization\_rev2.doc)

Regards, Bob Robert J. Tucker
Regulatory Programs Manager - DCSE Technology
DuPont Chemical Solutions Enterprise
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
Fax 302-992-4094

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http://www.DuPont.com/corp/email disclaimer.html





09-106398 SEP Characterization\_rev1.doc 09-106398 SEP\_Characterization\_rev2.doc

#### Mark Garvey/DC/USEPA/US

12/02/2009 10:04 PM

To Greg Fritz

cc Cathy Fehrenbacher, David Lynch, Laurence Libelo, Michael Bellot, Tony Ellis

bcc

Subject Re: Fw:Breath-Taking Sums -- MPI Revised Characterization
Cost Estimate

We need to keep and eye on the money as we determine what the best course of action is.

Am I understanding these numbers correctly? Please let me know what you think about the over all cost projections.

Is \$3,762,790 for characterization alone what we want to do? This includes no SCAS testing. No Scas protocols. No SCAS work at all.

This looks like a non-starter to me. Mark

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement

#### Garvey.Mark@epa.gov

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Greg Fritz Dr. Gregory Fritz USEPA/OPPTS/OPPT... 12/02/2009 08:45:47 AM

From: Greg Fritz/DC/USEPA/US

To: Mark Garvey/DC/USEPA/US@EPA

Cc: Cathy Fehrenbacher/DC/USEPA/US@EPA, David Lynch/DC/USEPA/US@EPA, Laurence

Libelo/DC/USEPA/US@EPA, Michael Bellot/DC/USEPA/US@EPA, Tony

Ellis/DC/USEPA/US@EPA

Date: 12/02/2009 08:45 AM

Subject: Re: Fw: MPI Revised Characterization Cost Estimate



GF notes 09-106398 SEP Characterization\_rev1.doc



GF notes 09-106398 SEP\_Characterization\_rev2.doc

Dr. Gregory Fritz USEPA/OPPTS/OPPT/EETD Industrial Chemistry Branch (MC-7406M) 1200 Pennsylvania Ave., NW Washington, DC 20460

[Deliveries to: 1201 Constitution Ave., NW EPA East (ICC) Building Cube 5133K Washington, DC 20460]

202-564-8583 (direct) 202-564-8740 (branch) 202-564-8679 (fax)

Mark Garvey Please take a look at the new estimates... 12/01/2009 09:11:29 AM

Mark Garvey/DC/USEPA/US

To Greg Fritz, Laurence Libelo, Cathy Fehrenbacher

12/15/2009 09:53 AM

cc Michael Bellot bcc

. . .

Subject Fw: Newest (12/14/09) Estimate for Characterization at \$1.3 million --DuPont/MPI Characterization Assistance

Now includes total Carbon data.

If we have comments, we should talk about this with them on Monday.

Thanks, Mark

Mark Garvey
Attorney
202-564-4168
US EPA
Office of Civil Enforcement
Garvey.Mark@epa.gov

NOTE: This email and its attachments may contain confidential information, attorney-work product, enforcement sensitive material or privileged information.

---- Forwarded by Mark Garvey/DC/USEPA/US on 12/15/2009 09:49 AM -----

From: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

To: Mark Garvey/DC/USEPA/US@EPA

Cc: Andrea V Malinowski < Andrea. V. Malinowski@USA.dupont.com>, David

Lynch/DC/USEPA/US@EPA, Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

Date: 12/15/2009 09:47 AM

Subject: Re: Fw: DuPont/MPI Characterization Assistance

#### Mark:

As I mentioned to you on the phone this morning, MPI's estimate now includes the weight percent total carbon. This is a complete estimate, pending anything that comes out of our call with MPI next week.

(See attached file: 09-106398 SEP\_Characterization\_rev3.doc)

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager - DCSE Technology
DuPont Chemical Solutions Enterprise
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
Fax 302-992-4094

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http://www.DuPont.com/corp/email\_disclaimer.html



09-106398 SEP\_Characterization\_rev3.doc

Mark Garvey/DC/USEPA/US

12/15/2009 09:29 AM

To Greg Fritz, Laurence Libelo, David Lynch, Cathy

Fehrenbacher

cc Michael Bellot, Tony Ellis

bcc

Subject Fw: Technical Questions -- DuPont/MPI Characterization

Assistance

DuPont would like to have a conference call on this. Would Monday at 10:00 work?

Mark Garvey
Attorney
202-564-4168
US EPA
Office of Civil Enforcement
Garvey.Mark@epa.gov

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#### ---- Forwarded by Mark Garvey/DC/USEPA/US on 12/15/2009 09:25 AM -----

From: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

To: Mark Garvey/DC/USEPA/US@EPA

Cc: Andrea V Malinowski <Andrea.V.Malinowski@USA.dupont.com>, David

Lynch/DC/USEPA/US@EPA, Robert J Tucker < Robert. J. Tucker@USA.dupont.com>

Date: 12/11/2009 11:39 AM

Subject: Re: Fw: DuPont/MPI Characterization Assistance

#### Mark:

As I mentioned on our 12/8/09 conference call, MPI and DuPont have technical questions related to the characterization work. DuPont and MPI scientists put together a list of questions that I am including here. On questions 6 and 8, there are references to your 11/10/09 email which I included here for easy reference. I was hoping we could have a call early next week to discuss so we can finalize the contract documents for EPA approval. Please suggest dates/times and I will line up the DuPont and MPI scientists. Thanks.

(See attached file: SEP questions for EPA 12-11-09.doc)

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager - DCSE Technology
DuPont Chemical Solutions Enterprise
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
Fax 302-992-4094

Garvey.Mark@epama
il.epa.gov

11/10/2009 04:33 PM Robert J Tucker/AE/DuPont@DuPont

CC

То

Andrea V
Malinowski/AE/DuPont@DuPont,
Ellis.Tony@epamail.epa.gov,
Fehrenbacher.Cathy@epamail.epa.gov,
Bellot.Michael@epamail.epa.gov,
Lynch.David@epamail.epa.gov,
Fritz.Greg@epamail.epa.gov,
Libelo.Laurence@epamail.epa.gov
Subject

Fw: DuPont/MPI Characterization Assistance

#### Bob:

Below is information we discussed on the conference call last week. EPA believes this will help with the Characterization of the 2 variants ( "Purified Fluorotelemer Products" and the "Lab-scale Synthesized Fluorotelemer Products") by MPI.

Please call me or email me if you have any questions.

Thank You, Mark

Mark Garvey Attorney 202-564-4168
US EPA
Office of Civil Enforcement
Garvey.Mark@epa.gov

NOTE: This email and its attachments may contain confidential information,

attorney-work product, enforcement sensitive material or privileged information.

---- Forwarded by Mark Garvey/DC/USEPA/US on 11/10/2009 04:27 PM ----

\_\_\_\_

#### DRAFT LANGUAGE FOR DUPONT/MPI

EPA has developed the following information to assist DuPont and MPI to develop a work plan and cost estimate for the characterization of fluorotelomer products for the DuPont SEP. This information is not intended to be prescriptive, but rather to identify elements EPA believes are important and necessary components of an acceptable work plan.

EPA has developed this approach with the central objectives of minimizing volatilization losses and characterizing homogeneous phases.

#### Sequential extraction with MTBE

Perform triplicate series of extractions for each sparged commercial fluorotelomer product and low residual commercial fluorotelomer product measuring analytes in each extract once.

That will be 2 variants of all 9 (A - D series) products in triplicate analyzed one time each for neutrals and acids (LC plus GC methods) ==> 54 samples times 2 times the number of extractions plus the MTBE cap + aq. layer in MTBE (see below)

- 1. If the materials to be characterized are stabilized aqueous dispersions start with a known mass of suspension in a vial.
- 2. Add more MTBE than can dissolve in the suspension so that MTBE floats on top of the suspension -- effectively a capping trap.
- 3. Add salt (possibly in solution) , tetrabutylammonium -hydrogen sulfate (TBAHS), sonicate.
- 4. MTBE which should be homogeneous; this is sample (a) capping MTBE for residuals [neutrals and PFOA]
- 5. Draw a measured sample from the aqueous phase into a syringe with the needle stuck thru the MTBE cap into the bulk aqueous phase and dissolve this aqueous rich sample (b) in MTBE for analysis; analyze the MTBE samples (a) & (b)
- 6. Collect any solid and attempt to dissolve it in MTBE for analysis.
- 7. Repeat sequence above for second MTBE extraction on remaining solids from step 6

- 8. Separately analyze 6) & 7) for residuals [neutrals and PFOA]
- 9. Repeat sequence above for 3rd MTBE extraction + analysis
- 10. Repeat sequence above for 4th MTBE extraction + analysis plot to see if plateau achieved [5th & 6th MTBE extraction unnecessary]
- 11. Repeat sequence above for 5th MTBE extraction + analysis
- 12. Repeat sequence above for 6th MTBE extraction + analysis
- 13. Conduct 1st ACN: Water extraction + separate analysis of each extract
- 14. Repeat for 2nd ACN: Water extraction + separate analysis of each extract

#### MTBE Extraction Endpoint

MTBE extraction endpoint is reached when the quantity of residuals in the last extract is <0.1 % of the total quantity of residuals in all previous extracts. If extraction endpoint has not been reached by 6th extraction, consult with EPA. Once the number of extractions required to reach the extraction endpoint has been established for pilot test group A1, purified fluorotelomer product, then use the same number of extractions for the remaining purified fluorotelomer products and fluorotelomer products of that group (A1, A2, A3). Use the same approach for groups B, C, and D.

#### ACN: Water Extraction Endpoint

ACN: water extraction endpoint is reached after two sequential ACN: water extractions with separate analysis of extracts. If analysis of second ACN:water extraction yields < 0.1% recovery of all residuals then duplicative and triplicate second ACN:water extracts need not be performed for the remaining series samples.

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SEP questions for EPA 12-11-09.doc

#### Mark Garvey/DC/USEPA/US

05/10/2010 04:06 PM

To Robert J Tucker

cc Andrea V Malinowski, David Lynch, Michael Bellot, Cathy Fehrenbacher

bcc

Subject Re: Approval of Wildlife Work Plan with Certain Modifications

#### Bob:

EPA anticipates working closely with DuPont in order to give input on a weekly or biweekly basis throughout the duration of the Wildlife work. Based on email and phone conferences with DuPont, Wildlife and EPA since March 16, it's our understanding that the cost estimates in the Wildlife Work Plan are maximum estimates and that there is likely to be significant cost savings as the work progresses. EPA believes that the Work Plan should be modified to identify substance A3 for pilot testing concurrently with the control pilot. EPA understands that the \$454,000 estimate stated in the Work Plan Appendix A - Summary of Estimated costs on page 12 is for 24 months of rental. Based on an expected 18 months of use, the cost estimate should be amended to \$18,917 per month and a total of \$340,500. Finally, as mentioned in a prior email, EPA has decided NOT to include the 3 analytes that are not commercially available. Thus there would be no need for custom synthesis. There would also be no need for analysis of these 3 analytes in the test substances and biodegradation studies. The names of these are on page 15 - Appendix D of the Work Plan attached. The 3 analytes to exclude are: 2-H Perfluorooctanoic acid (2-H PFOA) CAS# 142821-003-2, 7-3 Fluorotelomer unsaturated acid (7-3 FTUCA) CAS# 755-03-3, and 7-3 Fluorotelemer unsaturated amide (7-3 UAmide) CAS# 56017-64-2.

With these modifications and the understanding of continual input as described above, The Wildlife Work Plan is approved by EPA.

Thank	You
Mark	

Mark Garvey Attorney 202-564-4168 US EPA Office of Civil Enforcement

Garvey.Mark@epa.gov

NOTE: This email and its attachments may contain confidential information, attorney-work product, enforcement sensitive material or privileged information.

Robert J Tucker Mark: EPA should have received the at... 03/18/2010 09:38:11 AM

From: Robert J Tucker < Robert.J.Tucker@USA.dupont.com>

To: Mark Garvey/DC/USEPA/US@EPA

Cc: Andrea V Malinowski < Andrea. V. Malinowski@USA.dupont.com>

Date: 03/18/2010 09:38 AM Subject: Wildlife Work Plan

#### Mark:

EPA should have received the attached work plan in electronic (word and pdf) and hard copy form yesterday for review and approval.

(See attached file: Biodegradation SEP Work Plan.pdf)

Regards, Bob

Robert J. Tucker
Regulatory Programs Manager
DuPont Chemicals and Fluoroproducts
Barley Mill Plaza 23-2233
4417 Lancaster Pike
Wilmington, DE 19805
Office 302-992-5803
Fax 302-992-4094

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Biodegradation SEP Work Plan.pdf

Matthew Lorber/DC/USEPA/US

02/24/2010 09:16 AM

To Gina Perovich, David Bussard, Cathy Fehrenbacher, Lynn Flowers

cc Peter Egeghy

bcc

Subject ORD publication on exposure to PFOS

Addressees - The ORD study on exposure to PFOS was published on-line at the Journal of Exposure



# **Michael Hom/R4/USEPA/US** 02/09/2010 11:11 AM

To Bonnie Sawyer, Dan Olone, Frank Ney, Gail Mitchell, Glenn Adams, Laurence Libelo, Lee Thomas, Mike Neill, Rebecca Fauver, Sean Ireland, Stacey Haire, William Bush, WilliamT Jones

CC

bcc

Subject Decatur Drinking Water Well Survey and Sampling Monthly Status Report Jan 15 2010

FYI



Drinking Water Well Survey and Sampling Status Report January 15 2010.PDF

#### Michael Hom/R4/USEPA/US

02/10/2010 02:30 PM

To Connie Roberts, Archie Lee, Bonnie Sawyer, Brian Gross, Connie Roberts, Dan Olone, David Apanian, Davina Marraccini, Dawn Harris-Young, Dee Stewart, Donnette Sturdivant, Doug Mundrick, Frank Ney, Gail Mitchell, Glenn Adams, Gracy Danois, Laura Niles, Laurence Libelo, Lee Thomas, Michael Hom, Mike Neill, Rebecca Fauver, Sean Ireland, Stacey Haire, Stallings Howell, Suzanne Rubini, William Bush, WilliamT Jones

CC

bcc

Subject Dalton Utilities Feb 3, 2010 Section 308 Submittals

FYI. Latest results of drinking water wells and soils at individual properties that used compost.

Please be aware of personal privacy concerns when sharing.



Dalton 308 Response Feb 03 2010 Attachment G Compost Use Results.PDF



Dalton 308 Response Feb 03 2010 Attachment F Compost Use Results.PDF



Dalton 308 Response Feb 03 2010 Attachment E Compost Use Results.PDF



Dalton 308 Response Feb 03 2010 Attachment D Compost Use Results.PDF



Dalton 308 Response Feb 03 2010 Attachment C Compost Use Results.PDF



Dalton 308 Response Feb 03 2010 Attachment B Compost Use Results.PDF



Dalton 308 Response Feb 03 2010 Attachment A Drink Water Well Results.PDF



Dalton 308 Response Feb 03 2010 Transmittal of Drinking Water and Compost Use Results.PDF

#### Michael Hom/R4/USEPA/US

01/07/2010 10:31 AM

To Connie Roberts, Dan Olone, Gail Mitchell, Glenn Adams, Laurence Libelo, Lee Thomas, Mike Neill, Rebecca Fauver, Sean Ireland, Stacey Haire, William Bush, WilliamT Jones

CC

bcc

Subject Decatur Drinking Water well Survey and Sampling Monthly Status Report

FYI.



Drinking Water Well Survey and Sampling Status Report December 15 2009.PDF

#### Michael Hom/R4/USEPA/US

02/10/2010 02:54 PM

To Connie Roberts, Gail Mitchell, Glenn Adams, Laurence Libelo, Lee Thomas, Mike Neill, Rebecca Fauver, Sean Ireland, Ed Sims, Rick Stevens, Robert Bastian, Mark Meckes, Laura Boczek

CC

bcc

Subject Fw: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe Acrobat Professional

#### FYI, MMSD is analyzing for PFCs in Milorganite.

----- Forwarded by Michael Hom/R4/USEPA/US on 02/10/2010 02:40 PM -----

From: "Smart, Daphne Y" <DDY@adem.state.al.us>

To: Michael Hom/R4/USEPA/US@EPA, Gail Mitchell/R4/USEPA/US@EPA

"Dean, Glenda" <GLD@adem.state.al.us>, "Ramsey, Samuel" <SRamsey@adem.state.al.us> Cc:

02/10/2010 02:33 PM Date:

FW: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe Subject:

Acrobat Professional

ADEM received the attached biosolids report, which includes PFC testing results. We wanted to ensure that EPA was also aware of this report.

The letter was addressed to the previous Biosolids contact for the State of GA. Mike – as discussed by

phone please forward to the new GA contact.

If you need additional information, please do not hesitate to contact me.

Thank you,

Daphne Y. Smart, Chief Municipal Permit Section Water Division

(334) 271-7801



Mission: Assure for all citizens of the state a safe, healthful and productive environment

From: Caldwell, Mattie

Sent: Thursday, February 04, 2010 2:06 PM

To: Smart, Daphne Y

Subject: XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf - Adobe Acrobat

Professional



XXX XXXX XX 02-01-2010 BIOS MFC MILORGANITE BIOSOLIDS REPORT.pdf

#### Michael Hom/R4/USEPA/US

01/25/2010 09:33 AM

To Connie Roberts, Gail Mitchell, Lee Thomas, Mike Neill, Rebecca Fauver, WilliamT Jones, William Bush, Sean Ireland, Stacey Haire, Laurence Libelo

cc bcc

Subject Dalton 308 Response Jan 13 2010 Revised Drinking Water and Compost Plans

FYI...



Dalton 308 Response Jan 13 2010 Revised Composted Biosolids Monitoring Pland and Sampling Protocol Attachment D.PDF



Dalton 308 Response Jan 13 2010 Thermal Desorption Testing Attachment C.PDF



Dalton 308 Response Jan 13 2010 Revised Private Drinking Water Well Monitoring Report Attachment B.PDF



Dalton 308 Response Jan 13 2010 Revised Private Drinking Water Well Survey Protocol Attachment A sans map.PDF



#### Michael Hom/R4/USEPA/US

12/01/2009 10:24 AM

To Connie Roberts, Gail Mitchell, Lee Thomas, Mike Neill, Rebecca Fauver, WilliamT Jones, William Bush, Sean Ireland, Stacey Haire, Laurence Libelo

CC

bcc

Subject Dalton 308 Response Nov 24 2009 Progress Report, Compost Use Review Report Results, Private Drinking Water Well Survey Results

#### NOTICE: ENFORCEMENT CONFIDENTIAL DO NOT RELEASE UNDER FOIA

See attached. Please be aware of personal privacy concerns should you forward this information.



Dalton 308 Response Nov 24 2009 Compost Use Review Report Results.PDF



Dalton 308 Response Nov 24 2009 Transmittal Letter Monthly Progress Report MOA with GaDNR Wildlife Sampling Protocol.PDF



Dalton 308 Response Nov 24 2009 Private Drinking Water Well Survey Results.PDF

Michael Hom, Environmental Engineer Clean Water Enforcement Branch Water Protection Division EPA, Region 4 61 Forsyth Street Atlanta, Georgia 30303 404-562-9748 office 404-562-9729 fax

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Michael Hom/R4/USEPA/US 02/17/2010 11:18 AM To Connie Roberts, Gail Mitchell, Lee Thomas, Mike Neill, Rebecca Fauver, WilliamT Jones, William Bush, Sean Ireland, Stacey Haire, Laurence Libelo, Frank Ney

СС

hcc

Subject Dalton 308 Response Feb 10 2010 Drinking Water, Soils and

#### Composed Biosolids Results

#### FYI. Latest results.

Please be aware of personal privacy concerns when sharing.



Dalton 308 Response Feb 10 2010 Attachment A Drink Water Well Results.PDF



Dalton 308 Response Feb 10 2010 Attachment E Aged Composted Biosolids Results.PDF



Dalton 308 Response Feb 10 2010 Attachment D Compost Use Results.PDF



Dalton 308 Response Feb 10 2010 Transmittal of Drinking Water and Compost Use Results.PDF



Dalton 308 Response Feb 10 2010 Attachment C Compost Use Results.PDF



Dalton 308 Response Feb 10 2010 Attachment B Compost Use Results.PDF

### Michael Hom/R4/USEPA/US

03/04/2010 03:47 PM

To Connie Roberts, Gail Mitchell, Lee Thomas, Mike Neill, Rebecca Fauver, WilliamT Jones, William Bush, Sean Ireland, Stacey Haire, Laurence Libelo, Frank Ney

CC

bcc

Subject Dalton 308 Response Feb 24 2010 Monthly Report plus LAS Results, Wild Turkey Results, and WWTPs Results

#### FYI. Latest results.



Dalton 308 Response Feb 24 2010 Monthly Progress Report and LAS and Wildlife Data.PDF



Dalton 308 Response Feb 24 2010 Attachment B 2 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment B 1 of 2 LAS Monitoring Wells.PDF



Dalton 308 Response Feb 24 2010 Attachment F WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment E WWTPs Inf Eff.PDF



Dalton 308 Response Feb 24 2010 Attachment D Wild Turkey Serum.PDF



Dalton 308 Response Feb 24 2010 Attachment C Wild Turkey Muscle and Liver.PDF



Dalton 308 Response Feb 24 2010 Attachment A LAS Monitoring Well and Surface Water.PDF

# **Michael Hom/R4/USEPA/US** 03/12/2010 02:55 PM

To Connie Roberts, Gail Mitchell, Lee Thomas, Mike Neill, Rebecca Fauver, WilliamT Jones, William Bush, Sean Ireland, Stacey Haire, Laurence Libelo, Frank Ney, Dan Olone

СС

bcc

Subject Dalton 308 Response March 2 2010 LAS Monitoring Wells WWTP PWS Results

FYI. Latest results.

Dan, see Attachment E.



Dalton 308 Response March 2 2010 LAS Monitoring Wells River WWTP PWS Transmittal Letter.PDF



Dalton 308 Response March 2 2010 PWS Attachment E.PDF Dalton 308 Response March 2 2010 WWTP Attachment D.PDF



Dalton 308 Response March 2 2010 WWTP Attachment C.PDF Dalton 308 Response March 2 2010 River Attachment B.PDF



Dalton 308 Response March 2 2010 LAS Monitoring Wells Attachment A 2 of 2.PDF



Dalton 308 Response March 2 2010 LAS Monitoring Wells Attachment A 1 of 2.PDF

## Michael Hom/R4/USEPA/US

04/15/2010 10:59 AM

To Connie Roberts, Gail Mitchell, Lee Thomas, Mike Neill, Rebecca Fauver, WilliamT Jones, William Bush, Sean Ireland, Stacey Haire, Laurence Libelo, Frank Ney, Dan Olone

СС

bcc

Subject Dalton April 12 2010 IU Collection System WWTP Results

FYI. Results from the GaDNR/UGA sampling of industrial users, collection system, and WWTPs as per DU's MOA.

I have requested additional information in accordance with the MOA scope of work, including: sampling location (GPS coordinates; photos of all sampling locations; industrial user information; and data presented by IU and sector, as the attached data are only identified by sample number.



Dalton April 12 2010 Ga DNR UGA Industrial Users Collection System Survey Transmittal Letter.PDF



Dalton April 12 2010 Ga DNR UGA Industrial Users Collection System Survey Attachment H.PDF



Dalton April 12 2010 Ga DNR UGA Industrial Users Collection System Survey Attachment G.PDF



Dalton April 12 2010 Ga DNR UGA Industrial Users Collection System Survey Attachment F.PDF



Dalton April 12 2010 Ga DNR UGA Industrial Users Collection System Survey Attachment E.PDF



Dalton April 12 2010 Ga DNR UGA Industrial Users Collection System Survey Attachment D.PDF



Dalton April 12 2010 Ga DNR UGA Industrial Users Collection System Survey Attachment C.PDF



Dalton April 12 2010 Ga DNR UGA Industrial Users Collection System Survey Attachment B Results Summary. PDF



Dalton April 12 2010 Ga DNR UGA Industrial Users Collection System Survey Attachment A List of Permitted Industrial Users.PDF

#### Michael Hom/R4/USEPA/US

05/21/2010 03:10 PM

To Connie Roberts, Gail Mitchell, Lee Thomas, Mike Neill, Rebecca Fauver, WilliamT Jones, William Bush, Sean Ireland, Stacey Haire, Laurence Libelo, Frank Ney, Dan Olone

CC

bcc

Subject Dalton May 12 2010 Aged Composted Biosolids Results

FYI.



Dalton 308 Response May 12 2010 Aged Composted Biosolids Results Attachment A.PDF

Reminder: Section 308 letter required 2 composite samples per batch.

### Michael Hom/R4/USEPA/US

06/10/2010 08:13 AM

To Connie Roberts, Gail Mitchell, Lee Thomas, Mike Neill, Rebecca Fauver, WilliamT Jones, William Bush, Sean Ireland, Stacey Haire, Laurence Libelo, Frank Ney, Dan Olone

CC

bcc

Subject Dalton May 26 2010 LAS Results



Dalton 308 Response May 26 2010 Transmittal Letter Monthly Progress Report Attachment A LAS Data.PDF



Dalton 308 Response May 26 2010 Attachment A LAS Data 2 of 2.PDF



Dalton 308 Response May 26 2010 Attachment A LAS Data 1 of 2.PDF

Michael Hom/R4/USEPA/US

04/22/2010 10:54 AM

To Gail Mitchell, Connie Roberts, Lee Thomas, William Bush,

Sean Ireland

cc Laurence Libelo

bcc

Subject Fw: April 12 2010 submittal of data from the GaDNR/UGA

study

FYI. To follow-up on yesterday's meeting, Dalton sent GPS coordinates of the sample locations, and the industry id in a separate email, which I will forward next.

I will sort the data and revise the powerpoint graphs and provide locations on Google Map to see if there are any trends.

#### Mike

---- Forwarded by Michael Hom/R4/USEPA/US on 04/22/2010 10:48 AM -----

From: Dena Haverland <a href="mailto:dhaverland@dutil.com">dhaverland@dutil.com</a>
To: Michael Hom/R4/USEPA/US@EPA

Cc: Mark Marlowe <a href="marlowe@dutil.com">mark Buckner <a href="marlowe@dutil.com">mark Buckner @dutil.com</a>, Leslie Rush

<lrush@dutil.com>, "DeHihns, Lee" <Lee.DeHihns@alston.com>

Date: 04/22/2010 10:46 AM

Subject: RE: April 12 2010 submittal of data from the GaDNR/UGA study

#### Mike,

Please find attached the GPS coordinates for the sampling locations. A list of all the industrial locations sampled as part of this study was included in the April 12, 2010, correspondence to Ms. Gail Mitchell. Further, copies of all the industrial discharge permits which include the industrial user information such as business sector were submitted to you as Attachment G to our correspondence dated June 18, 2009.

A few photos were taken of the sampling locations; however, many industries have policies restricting photography on their property, therefore, not all locations were photographed. As such, these records were not included in the report.

If you have any additional questions, please contact me at 706-529-1010 or dhaverland@dutil.com.

Sincerely, Dena Haverland Regulatory Compliance Manager

----Original Message----

From: Hom.Michael@epamail.epa.gov [mailto:Hom.Michael@epamail.epa.gov]

Sent: Wednesday, April 14, 2010 2:24 PM

To: Dena Haverland

Cc: Mitchell.Gail@epamail.epa.gov; Roberts.Connie@epamail.epa.gov;

Bush.William@epamail.epa.gov

Subject: April 12 2010 submittal of data from the GaDNR/UGA study

Hi Dena,

Appreciate Dalton volunteering the information from the Ga DNR Sustainability Division and UGA industrial discharge study, transmitted April 12, 2010.

The MOA between DU and DNR that was sent to us on November 24, 2009, indicated that the final report would also include: sampling location (GPS coordinates; photos of all sampling locations; industrial user information; and data presented by IU and sector. These were not included in the April 12th submittal.

Will the above be forthcoming?

Thanks



Industrial Sampling ID and GPS.doc

Michael Hom/R4/USEPA/US 04/22/2010 10:55 AM To Gail Mitchell, Connie Roberts, Lee Thomas, William Bush, Sean Ireland

cc Laurence Libelo

bcc

Subject Fw: April 12 2010 submittal of data from the GaDNR/UGA study

---- Forwarded by Michael Hom/R4/USEPA/US on 04/22/2010 10:54 AM -----

From: Dena Haverland <a href="mailto:dhaverland@dutil.com">dhaverland@dutil.com</a>
To: Michael Hom/R4/USEPA/US@EPA

Cc: Mark Marlowe <mmarlowe@dutil.com>, Mark Buckner <mbuckner@dutil.com>, Leslie Rush

<lrush@dutil.com>, "DeHihns, Lee" <Lee.DeHihns@alston.com>

Date: 04/22/2010 09:40 AM

Subject: RE: April 12 2010 submittal of data from the GaDNR/UGA study

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Will the above be forthcoming?

Thanks



Companies and Sample ID xls

Rose Allison/DC/USEPA/US

cc Greg Schweer

To David Lynch, Laurence Libelo, Greg Fritz

05/26/2010 06:04 PM

bcc

Subject

Hi all, Attached please find the proposed agenda for the meeting with Asahi tomorrow at 3:00 pm in 4342. The Asahi attendees will be Dr. Shinya, Warren Lehrenbaum, and David Menotti. Rose

Rose Allison For Deliveries
Team Leader \*\*EPA East Building\*\*
New Chemicals Program \*1201 Constitution Ave NW \*
Chemical Control Division (7405M) \*\*Room 4419G\*\*
US EPA \*\*Wash DC 20004\*\*
1200 Pennsylvania Ave. NW
Washington, DC 20460

202/564-8970/FAX 202/564-9490

\_\_\_\_\_\_



- Proposed Agenda - 05-27-2010.doc

Rose Allison/DC/USEPA/US

To Jennifer Seed, Rebecca Jones, Steven Cragg, Jim Willis

04/06/2010 03:39 PM

cc Oscar Hernandez, Toni Krasnic, Laurence Libelo, Greg Fritz, Bob Morcock, Sara Pollack

bcc

Subject Fw: Mtg to discuss 8(e) letter contents



P08-509 8(e).pdf

Above is the 8(e) submission from DuPont. This is not a study required under the Consent Order but is a study that they are doing for other authorities. They are required to do a modified one-generation study in the Consent Order as well as a Pharmacokinetics study, 90-day toxicity study and the Chronic toxicity/carcinogenicity study at certain production volumes or time. Below please find the proposed agenda. This meeting will be tomorrow @ 11:00 am in 4140 and was requested by DuPont. Rose

Rose Allison For Deliveries
Team Leader \*\*EPA East Building\*\*
New Chemicals Program \*1201 Constitution Ave NW
Chemical Control Division (7405M) \*\*Room 4419H\*\*
US EPA \*\*Wash DC 20004\*\*
202/564-8970/FAX 202/564-9490

---- Forwarded by Rose Allison/DC/USEPA/US on 04/06/2010 03:16 PM -----

From: Jane Bradd Andersen <JANE-BRADD.ANDERSEN@usa.dupont.com>

To: Rose Allison/DC/USEPA/US@EPA

Date: 03/25/2010 09:05 AM

Subject: Re: Fw: Mtg to discuss 8(e) letter contents

Rose,

Here's the proposed agenda

- 1) Review study data for 8(e) letter and discuss pathforward.
- 2) Review Rat & Mouse 90 Day data, update of ongoing studies (modified one gen) & discuss species selection for 2 year study

Kind regards,

Jane Bradd-Andersen tel:302-999-2377 fax:302-999-2177 jane-bradd.andersen@usa.dupont.com

Allison.Rose@epam ail.epa.gov

03/18/2010 11:35

Jane Bradd Andersen/AE/DuPont@DuPont

CC

To

Subject

Re: Fw: Mtg to discuss 8(e) letter contents

http://www.DuPont.com/corp/email\_disclaimer.html

This communication is for use by the intended recipient and contains information that may be Privileged, confidential or copyrighted under applicable law. If you are not the intended recipient, you are hereby formally notified that any use, copying or distribution of this e-mail, in whole or in part, is strictly prohibited. Please notify the sender by return e-mail and delete this e-mail from your system. Unless explicitly and conspicuously designated as "E-Contract Intended", this e-mail does not constitute a contract offer, a contract amendment, or an acceptance of a contract offer. This e-mail does not constitute a consent to the

use of sender's contact information for direct marketing purposes or for transfers of data to third parties.

Francais Deutsch Italiano Espanol Portugues Japanese Chinese Korean

http://www.DuPont.com/corp/email\_disclaimer.html

Rose Allison/DC/USEPA/USToWarren.Lehrenbaum06/03/2010 03:05 PMccLaurence Libelo

bcc

Subject Fw: Washington methods

Warren, As we discussed at the meeting, here are some references from Laurence Libelo. I hope to talk with you tomorrow. I got your voice mail concerning my voicemail. Rose

Rose Allison For Deliveries
Team Leader \*\*EPA East Building\*\*
New Chemicals Program \*1201 Constitution Ave NW \*
Chemical Control Division (7405M) \*\*Room 4419G\*\*
US EPA \*\*Wash DC 20004\*\*
1200 Pennsylvania Ave. NW
Washington, DC 20460
202/564-8970/FAX 202/564-9490

----- Forwarded by Rose Allison/DC/USEPA/US on 06/03/2010 03:00 PM -----

From: Laurence Libelo/DC/USEPA/US
To: Rose Allison/DC/USEPA/US@EPA

Date: 06/03/2010 12:13 PM Subject: Washington methods

Rose,

I never got Warren's email. Can you please forward these on to him?

Thanks.

Laurence

\_\_\_\_\_

=======

E. Laurence Libelo, Ph.D.
Senior Environmental Engineer
Exposure Assessment Branch
Office of Pollution Prevention and Toxics
U.S. Environmental Protection Agency
OPPTS/OPPT/EETD/EAB
202-564-8553
FAX 202-546-8671



Sean Ireland/R4/USEPA/US

To Laurence Libelo

03/17/2010 05:04 PM

CC

bcc

Subject Fw: 3M Decatur - NPDES Permit No. AL0000205 - Pollution

Reduction Plan (PRP)

---- Forwarded by Sean Ireland/R4/USEPA/US on 03/17/2010 05:04 PM -----

From: Karrie-Jo Shell/R4/USEPA/US
To: Sean Ireland/R4/USEPA/US@EPA

Date: 03/10/2010 01:52 PM

Subject: Fw: 3M Decatur - NPDES Permit No. AL0000205 - Pollution Reduction Plan (PRP)

#### Karrie-Jo Robinson-Shell, P.E.

----- Forwarded by Karrie-Jo Shell/R4/USEPA/US on 03/10/2010 01:52 PM -----

From: "Ramsey, Samuel" <SRamsey@adem.state.al.us>

To: Karrie-Jo Shell/R4/USEPA/US@EPA, Mark Nuhfer/R4/USEPA/US@EPA

Date: 02/17/2010 11:26 AM

Subject: FW: 3M Decatur - NPDES Permit No. AL0000205 - Pollution Reduction Plan (PRP)

Scott Ramsey Industrial/Mining Section NPDES Permit Branch Water Division (334) 274-4220

**From:** gahohenstein@mmm.com [mailto:gahohenstein@mmm.com]

Sent: Wednesday, January 27, 2010 1:15 PM

To: Ramsey, Samuel

**Cc:** pdwirey1@mmm.com; dmschnobrich@mmm.com

Subject: 3M Decatur - NPDES Permit No. AL0000205 - Pollution Reduction Plan (PRP)

Dear Mr. Ramsey:

On September 30, 2009, the subject permit was reissued with modifications related to 3M's request to return treatment of its on-site generated sanitary wastewater from off-site (at the Decatur Utilities' Dry Creek POTW) to on-site (at the existing 3M Decatur WWTP). The reissued permit included a condition requiring 3M to prepare and submit for ADEM review a PRP for PFOA and PFOS. Attached for your

information and review is a copy of the PRP that 3M has prepared to fulfill this commitment.

A paper copy of the Plan should arrive at your office tomorrow. We thought it might also be helpful to have an electronic copy.

Please feel free to contact me with any comments or questions.

Sincerely,

Gary Hohenstein

Gary A. Hohenstein Bldg. 224-5W-03 Environmental Manager, Special Projects, EHS Operations

Tel: 651 737-3570 Triminet: 737-3570 Email: gahohenstein@mmm.com

Visit 3M's sustainability web site:



http://www.mmm.com/sustainability 3M Decatur Pollution Reduction Plan.pdf

Sean Ireland/R4/USEPA/US To Laurence Libelo

03/24/2010 04:00 PM

cc bcc

Subject Fw: Diakin discharge flow rates and PFOA levels

As requested...

----- Forwarded by Sean Ireland/R4/USEPA/US on 03/24/2010 03:59 PM -----

From: Laurence Libelo/DC/USEPA/US

To: Lee Thomas/R4/USEPA/US@EPA, Michael Hom/R4/USEPA/US@EPA, Sean

Ireland/R4/USEPA/US@EPA, William Bush/R4/USEPA/US@EPA

Date: 03/03/2009 05:13 PM

Subject: Diakin discharge flow rates and PFOA levels

Here is a report from Diakin on their discharges prior to 2004. On page 4 there is a table of flow rate and concentration.



4-7-2004 Daikin analytical report submissio

Sean Ireland/R4/USEPA/US

To Laurence Libelo

03/10/2010 05:52 PM

cc bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

----- Forwarded by Sean Ireland/R4/USEPA/US on 03/10/2010 05:52 PM -----

From: Sean Ireland/R4/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA

Cc: SRamsey@adem.state.al.us Date: 03/01/2010 10:41 AM

Subject: Fw: Morgan County Landfill Leachate SID Permit Parameters

Laurence, ADEM is trying to determine who is able to analyze these remaining PFC parameters. Please response to Scott directly, and 'cc' me, since today is my only day in the office until next Monday. Thanks!

Sean Ireland Environmental Engineer Clean Water Enforcement Branch U.S. EPA, Region 4 (404) 562-9776 (404) 562-9729 fax

----- Forwarded by Sean Ireland/R4/USEPA/US on 03/01/2010 10:38 AM -----

From: "Ramsey, Samuel" <SRamsey@adem.state.al.us>

To: Sean Ireland/R4/USEPA/US@EPA

Date: 02/26/2010 10:17 AM

Subject: FW: Morgan County Landfill Leachate SID Permit Parameters

Sean do you know anything about the sampling methods for 9:2 s Florotelomer Alcohol and 11:2 s Florotelomer and the c15-c18 PFCA

#### **Thanks**

Scott Ramsey Industrial/Mining Section NPDES Permit Branch Water Division (334) 274-4220

From: Dan Cooper [mailto:dcooper@ttlusa.com] Sent: Thursday, February 25, 2010 10:21 AM

**To:** Ramsey, Samuel; Dean, Glenda **Cc:** Patrick Gupton; Sheryle Reeves

**Subject:** Morgan County Landfill Leachate SID Permit Parameters

Hi Scott: Thanks for your willingness today to take a look at the pages attached to this e-mail regarding the monitoring parameters for certain compounds. As we briefly discussed, our conversations with MPI have indicated that no analytical procedure could be found for the last four acids listed on page 1 for DSM001S. We also believe that the procedures cited on page 1 a as 9:2 s Florotelomer Alcohol 2/ and 11:2 s Florotelomer Alcohol 2/ may have been listed in error for 7:2 and 6:2 respectively. We are still researching the analytical procedures for Alpha Terpinoel and Benzoic Acid for the same discharge point listed on page 1 a. We really appreciate your review of this information; so we can make certain of the definitive reporting requirements. As you know, Sheryle Reeves and I have a meeting scheduled with Glenda, Dale and Eric on Monday, March 1 regarding another matter and will be available to discuss this in more detail if you find it beneficial. In the meantime, please feel free to call me if you have questions or are able to sort out the correct procedure citations. We will continue our investigation of the guidelines and procedures and will let you know if we find anything pertinent to resolution.

Sincerely, Dan

DOC022510.pdf

Dan Cooper, P.E.
Branch Manager
TTL, Inc.
4154 Lomac Street
Montgomery, Alabama 36106
ph (334) 244-0766
fax (334) 244-6668
www.ttlusa.com

Sean Ireland/R4/USEPA/US

To Laurence Libelo

12/10/2009 05:14 PM

cc bcc

Subject Fw: Morgan County Regional Landfill - Leachate Treatment Pilot Tests

I haven't looked at the report yet, but I expect you'll find it rather interesting.

Sean Ireland Environmental Engineer Clean Water Enforcement Branch U.S. EPA, Region 4 (404) 562-9776 (404) 562-9729 fax

---- Forwarded by Sean Ireland/R4/USEPA/US on 12/10/2009 05:11 PM -----

From: "Ramsey, Samuel" <SRamsey@adem.state.al.us>

To: Sean Ireland/R4/USEPA/US@EPA, "Poolos, Ed" <EFP@adem.state.al.us>

Date: 12/10/2009 04:09 PM

Subject: FW: Morgan County Regional Landfill - Leachate Treatment Pilot Tests

Scott Ramsey Industrial/Mining Section NPDES Permit Branch Water Division (334) 274-4220

From: Blake McAnally [mailto:blakem@pughwrightmcanally.com]

Sent: Thursday, December 10, 2009 2:02 PM

**To:** Ramsey, Samuel **Cc:** 'Terry, Rickey'

Subject: Morgan County Regional Landfill - Leachate Treatment Pilot Tests

Importance: High

Scott,

Please see the attached letter w/report. Call if you have any questions.

Thanks,

# H. Blake McAnally, PE/PLS, President

#### **Pugh Wright McAnally**

P. O. Box 2419 Decatur, AL 35602 blakem@pughwrightmcanally.com p (256) 353-3937 f (256) 350-2285



MCRL Leachate Pilot Tests.pdf

Sean Ireland/R4/USEPA/US

12/17/2009 04:13 PM

To Laurence Libelo

CC

bcc

Subject Fw: Neo Industries

#### ----- Forwarded by Sean Ireland/R4/USEPA/US on 12/17/2009 04:13 PM -----

From: "Dean, Glenda" <GLD@adem.state.al.us>
To: Sean Ireland/R4/USEPA/US@EPA

Cc: Gail Mitchell/R4/USEPA/US@EPA, "Ramsey, Samuel" <SRamsey@adem.state.al.us>,

"Sanderson, Eric" <ELS@adem.state.al.us>, "Crockett, Chip" <VHC@adem.state.al.us>, "Poolos,

Ed" < EFP@adem.state.al.us>

Date: 12/17/2009 04:06 PM Subject: FW: Neo Industries

Sean,

ADEM inspected the Neo Industries facility. Neo chrome plates large steel pins. The hex chrome bath is approximately 7500 gals. Once per month the water remaining in the hex chrome bath is released to a 1500 gal tank where it is treated and then released to Decatur Utilities. Wastewater from the soap tank is sent (approx. annually) to Enviroright in Ohio.

Neo does not have an SID permit. Since the discharge is from metal finishing operations, the Dept. is in the process of contacting them to advise that an SID is required.

Note the attachment in which Neo certifed to DU of non-use of PFCs. To confirm this information, at my request the ADEM Decatur Field Office is working on the approval to collect and analyze the discharge from Neo to DU.

Glenda L. Dean, Chief NPDES Permit Branch Water Division gld@adem.state.al.us 334-270-5602 334-279-3051 (fax)

Mission: Assure for all citizens of the State a safe, healthful and productive environment

----Original Message----

From: Tom Cleveland [mailto:TCleveland@decaturutilities.com]

Sent: Thursday, December 17, 2009 9:35 AM

To: Dean, Glenda

Subject: FW: Neo Industries

FYI

Tom Cleveland, P.E. Plants and Engineering Manager Decatur Utilities 256-301-4605 office 256-654-1630 cellular 256-552-1412 fax

This e-mail communication (including any attachments) may contain legally privileged and confidential information intended solely for the use of the intended recipient. If you are not the intended recipient, you should immediately stop reading this message and delete it from your system. Any unauthorized reading, distribution, copying or other use of this

communication (or its attachments) is strictly prohibited.

----Original Message----

From: Tom Cleveland

Sent: Wednesday, December 02, 2009 11:10 AM

To: Poolos, Ed

Subject: FW: Neo Industries

FYT

Tom Cleveland, P.E. Plants and Engineering Manager Decatur Utilities 256-301-4605 office 256-654-1630 cellular 256-552-1412 fax

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----Original Message----

From: Steve Caufield

Sent: Tuesday, December 01, 2009 4:22 PM

To: Tom Cleveland; Mark Cupps Subject: RE: Neo Industries

Tom:

Letters from NEO Industries re PFC inquiries (found in PIMS)

Steve C.

----Original Message----

From: Tom Cleveland

Sent: Tuesday, December 01, 2009 3:40 PM

To: Steve Caufield; Mark Cupps

Subject: Neo Industries

Do we have non-PFC use letter from Neo? Is so, email it to me ASAP. If not, contact them an get them to certify. If we have letter, it should be in PIMS.





12012009041235.pdf 12012009040857.doc

Sean Ireland/R4/USEPA/US

To Laurence Libelo

03/17/2010 05:05 PM

cc bcc

Subject Fw: Neo Industries

#### ---- Forwarded by Sean Ireland/R4/USEPA/US on 03/17/2010 05:05 PM -----

From: "Ramsey, Samuel" <SRamsey@adem.state.al.us>

To: Sean Ireland/R4/USEPA/US@EPA, Tom Cleveland <TCleveland@decaturutilities.com>

Date: 03/16/2010 02:07 PM Subject: FW: Neo Industries

Scott Ramsey Industrial Section Industrial/Municipal Branch Water Division (334) 274-4220

From: Dean, Glenda

Sent: Saturday, March 13, 2010 2:51 PM

To: Ramsey, Samuel

**Cc:** Sanderson, Eric; Poolos, Ed **Subject:** FW: Neo Industries

Importance: High

Scott,

We should provide this information to NEO, Tom Cleveland at DU and Sean Ireland at EPA. Also, I understand that Neo is a metalfinisher and, therefore, needs an SID permit. We need to notify them, if we haven't already done so. Note the results for Pb are above the MF EGLs.

Glenda L. Dean, Chief NPDES Permit Branch Water Division gld@adem.state.al.us 334-270-5602 334-279-3051 (fax)



Mission: Assure for all citizens of the State a safe, healthful and productive environment

From: Poolos, Ed

Sent: Thursday, March 11, 2010 8:02 AM

To: Dean, Glenda Cc: Jenkins, Steve Subject: Neo Industries

#### Glenda,

Attached are the results of the sampling event at NEO Industries from February 9th.

The attachments are:

- 1) The PFOA Summary sheet
- 2) The ADEM Lab data Reminder we collected the parameters that were on the expired NEO permit
- 3) The memo from sample collectors regarding sampling event

#### 4) The final report from MPI concerning the PFC data

If you have any questions or need anything just let me know,







Ed PFC Summary Data - NEOxls PFC Sampling Memo to File - NEO Industries.pdf NEO Lab Results - Expired Permit Parameters.pdf



NEO Lab Results TTO.pdf

Sean Ireland/R4/USEPA/US

To Laurence Libelo

02/17/2010 01:15 PM

СС

bcc

Subject Morgan County Landfill Permit

Hi Laurence,

My last e-mail re. PFC-testing laboratories was to help ADEM find a laboratory that could sample for all the parameters we requested they put in the landfill permit. I'm attaching here the permit ADEM issued a couple weeks ago. If you see anything inconsistent in the list or have any specific thoughts on testing and testing locations, please let me know. If you don't have time to look it over, that's okay too. Just wanted to check.

Thanks.

Sean Ireland Environmental Engineer Clean Water Enforcement Branch U.S. EPA, Region 4 (404) 562-9776 (404) 562-9729 fax



3779 IU085200552 103 02-03-2010 FPER CKO NA.pdf

Sean Ireland/R4/USEPA/US

To Laurence Libelo

01/28/2010 12:17 PM

cc Michael Hom

bcc

Subject Decatur collection system sampling results



Read this first: ADEM request for results, 2010-01-20.PDF



And the response next: DU collection system results, 2010-01-27.pdf

Sean Ireland/R4/USEPA/US

To Laurence Libelo

03/01/2010 10:41 AM

cc SRamsey

bcc

Subject Fw: Morgan County Landfill Leachate SID Permit Parameters

Laurence, ADEM is trying to determine who is able to analyze these remaining PFC parameters. Please response to Scott directly, and 'cc' me, since today is my only day in the office until next Monday. Thanks!

Sean Ireland Environmental Engineer Clean Water Enforcement Branch U.S. EPA, Region 4 (404) 562-9776 (404) 562-9729 fax

---- Forwarded by Sean Ireland/R4/USEPA/US on 03/01/2010 10:38 AM -----

From: "Ramsey, Samuel" <SRamsey@adem.state.al.us>

To: Sean Ireland/R4/USEPA/US@EPA

Date: 02/26/2010 10:17 AM

Subject: FW: Morgan County Landfill Leachate SID Permit Parameters

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#### Thanks

Scott Ramsey Industrial/Mining Section NPDES Permit Branch Water Division (334) 274-4220

From: Dan Cooper [mailto:dcooper@ttlusa.com] Sent: Thursday, February 25, 2010 10:21 AM

**To:** Ramsey, Samuel; Dean, Glenda **Cc:** Patrick Gupton; Sheryle Reeves

Subject: Morgan County Landfill Leachate SID Permit Parameters

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Sincerely, Dan

Dan Cooper, P.E.
Branch Manager
TTL, Inc.
4154 Lomac Street
Montgomery, Alabama 36106
ph (334) 244-0766
fax (334) 244-6668
www.ttlusa.com

Toni Krasnic/DC/USEPA/US

02/24/2010 02:53 PM

To Bradley Grams

cc Connie Roberts, Katherine Sleasman, Kimberly Harris, Laurence Libelo, Lee Thomas

bcc

Subject Re: Fw: Perfluorinated Compounds Research Pulls for Risk

and Exposure Assessment, Fate and Transport and

Remediation/Clean-up.

Hi Bradley,

DOC022510.pdf

Thanks for doing this. It'd be great if we can get a monthly sweep list of new publications on PFCs.

#### Thanks again,

#### Toni Krasnic

EPA/OPPTS/OPPT/CCD/ECB

EPA East; 1201 Constitution Ave NW, Room 4351C; Washington, DC 20004 Mail: EPA; 1200 Pennsylvania Ave NW; MC-7405M; Washington, DC 20460

Phone: 202-564-0984; Fax: 202-564-4775 PFOA Website: http://www.epa.gov/oppt/pfoa

TSCA 8(e) Website: http://www.epa.gov/opptintr/tsca8e

Bradley Grams Hi Lee: The Cincinnati library performed... 02/23/2010 03:02:05 PM

From: Bradley Grams/R5/USEPA/US
To: Lee Thomas/R4/USEPA/US@EPA

Cc: Toni Krasnic/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA, Katherine

Sleasman/DC/USEPA/US@EPA, Connie Roberts/R4/USEPA/US@EPA, Kimberly

Harris/R5/USEPA/US@EPA

Date: 02/23/2010 03:02 PM

Subject: Fw: Perfluorinated Compounds Research Pulls for Risk and Exposure Assessment, Fate and

Transport and Remediation/Clean-up.

#### Hi Lee:

The Cincinnati library performed an abstract search for me on PFCs, and also specifically PFOA and PFOS, research related to (1) risk and exposure assessment, (2) fate and transport and (3) remediation/clean-up. This one goes back to 2006; however, we can also go back to the 1960's as needed, if that would assist ORD in crafting a "State of the Science" discussion.

Let me know what you think. Cincinnati can tailor research searches as well to other more specific topics. Additionally, they can perform weekly or monthly PFC literature sweeps across journals, to get updates for ORD and OPPTS, should that be helpful.

Thanks!

#### Cheers,

Bradley Randall Grams, B.Sc., B.A.

Environmental Scientist

OPPTS Sublead Region Coordinator, Reviewing and Reducing TSCA Chemical Risk

EPA Region 5

Land and Chemicals Division

Chemicals Management Branch, Toxics Section

77 West Jackson Boulevard (LC-8J)

Chicago, IL 60604

PHONE: (312) 886-7747 FAX: (312) 697-2527

E-MAIL: grams.bradley@epa.gov

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----- Forwarded by Bradley Grams/R5/USEPA/US on 02/23/2010 01:57 PM -----

From: Rachel Delaney/CI/USEPA/US
To: Bradley Grams/R5/USEPA/US@EPA

Date: 02/23/2010 01:54 PM

Subject: Re: Perfluorinated Compounds Research Pulls.

#### Hi Bradley,

Here are the results for the initial searches. Once you've had a chance to review the results, let me know if you have any questions or comments or feel like we are missing any topics or areas that we should cover. If everything looks good, I will begin updating these searches on Mondays with the PCB searches.







risk assmt 2-23-10.doc icleanup and remediation 2-23-10.doc if ate and transport 2-23-10.doc

Thanks! Rachel -----

Rachel Delaney
Reference Librarian
AWBERC Library
Contracted by ASRC Management Services
U.S. Environmental Protection Agency
26 W. Martin Luther King Drive
Cincinnati, Ohio 45268
(513) 569-7716
(513) 569-7709 fax

https://www.surveymonkey.com/s.aspx?sm=n4Slb8dq2D3fqQrD3701wg\_3d\_3d

<b>Bradley Grams</b>	Thanks Rachel! That would be great. F	02/23/2010 10:36:01 AM
Rachel Delaney	Dear Bradley, I will set these searches	02/23/2010 07:09:39 AM
Bradley Grams	Hi Rachel: Is there anyway that you cou	02/22/2010 12:22:05 PM
Rachel Delaney	Hi Bradley, The results of your literature	02/22/2010 10:04:29 AM

# Toni Krasnic/DC/USEPA/US

04/29/2010 12:40 PM

To Cathy Fehrenbacher, Jim Willis, Katherine Sleasman, Laurence Libelo

cc Greg Fritz, Rose Allison, Diane Sheridan

bcc

Subject Fw: PFOA and Toray Fluorofibers

Hi,

Attached please find the PPT for tomorrow's meeting. I'll print out copies for everyone.

Touray is still stuck on the "we have very low levels of PFOA" mantra, and we could use this meeting to remind them that they should be focusing on transitioning to alternatives.

Thanks,

tk

564.0984

----- Forwarded by Toni Krasnic/DC/USEPA/US on 04/29/2010 12:33 PM -----

From: "John H. Grady" <jhgrady@JonesDay.com>

To: Toni Krasnic/DC/USEPA/US@EPA

Cc: Art.N@tfa.toray.com
Date: 04/28/2010 06:36 PM

Subject: Re: PFOA and Toray Fluorofibers

Toni,

Attached is our proposed topics/agenda PowerPoint. We'll see you Friday at approx. 9:45 a.m.

John H. Grady JONES DAY 1420 Peachtree Street, N.E.

Atlanta, GA 30309 Direct: 404-581-8316 Fax: 404-581-8330 Cell: 678-575-8869

http://www.jonesday.com/jhgrady/

#### ========

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=======



ATI\_2421042\_1\_EPA Presentation.PPT

Toni Krasnic/DC/USEPA/US

03/30/2010 10:18 AM

To Cathy Fehrenbacher, Laurence Libelo

cc Dale Kemery, Priscilla Flattery

bcc

Subject Fw: Seeking PFOA letter

Hi Cathy,

Please see the request below from Ken Ward for two documents mentioned in Jim's March 3 letter to DuPont.. Do you have those document readily available?

Thanks,

tk

564 0984

----- Forwarded by Toni Krasnic/DC/USEPA/US on 03/30/2010 10:07 AM -----

From: Jim Willis/DC/USEPA/US

To: Toni Krasnic/DC/USEPA/US@EPA

Date: 03/29/2010 06:34 PM Subject: Fw: Seeking PFOA letter

Toni,

Could you please follow up.

#### Jim

---- Forwarded by Jim Willis/DC/USEPA/US on 03/29/2010 06:32 PM -----

From: Dale Kemery/DC/USEPA/US

To: "Priscilla Flattery" <Flattery.Priscilla@epamail.epa.gov>

Cc: "Jim Willis" < Willis.Jim@epamail.epa.gov>

Date: 03/29/2010 06:31 PM Subject: Fw: Seeking PFOA letter

His letter request is kind of nebulous. Is there even enough to identify it?

Dale Kemery Press Officer U.S. Environmental Protection Agency Washington, DC 20460 202-564-7839

---- Original Message -----

From: "Ken Ward Jr." [kward@wvgazette.com]

Sent: 03/29/2010 06:00 PM AST

To: Dale Kemery

Subject: RE: Seeking PFOA letter

Dale,

I have obtained the letter from another source. It's attached. See page 7 for reference to Cincinnati.

- I have several follow-up things, though --
- 1. This is apparently a letter from EPA to DuPont in response to a Dec. 18, 2009, document from DuPont to EPA. I would like a copy of that Dec. 18 document.
- 2. I would like a copy of the Cincinnati water data that it mentioned in this letter.

Thanks, Ken.

Ken Ward Jr.
Staff Writer
The Charleston Gazette
1001 Virginia St., East
Charleston, W.Va. 25301
(304) 348-1702
Fax: (304) 348-1233

http://wvgazette.com or http://wvgazette.com/News/Mining+the+Mountains

Read my blog, Coal Tattoo at http://blogs.wvgazette.com/coaltattoo/ and follow me on Twitter, http://twitter.com/Kenwardjr And check out Sustained Outrage, a Gazette watchdog journalism blog,

http://blogs.wvgazette.com/watchdog/

----Original Message----

From: Kemery.Dale@epamail.epa.gov [mailto:Kemery.Dale@epamail.epa.gov]

Sent: Monday, March 29, 2010 4:15 PM

To: kward@wvgazette.com

Subject: Re: Seeking PFOA letter

Ken -

I've been working to get this letter in response to another inquiry. I don't have it yet.

Dale Kemery
Press Officer
Office of Media Relations
U.S. Environmental Protection Agency
Washington, DC 20460
202-564-7839

From: "Ken Ward Jr." <kward@wvgazette.com>

To: Dale Kemery/DC/USEPA/US@EPA

Date: 03/29/2010 12:31 PM

Subject: Seeking PFOA letter

Dale,

I'm looking for a copy of a March 3 letter from EPA (Jim Willis of the Chemical Control Division) to DuPont concerning testing of water from the Ohio River in the vicinity of Cincinnati for PFOA.

I need to get this right away.

Thanks, Ken.

Ken Ward Jr. Staff Writer The Charleston Gazette 1001 Virginia St., East Charleston, W.Va. 25301 (304) 348-1702

Fax: (304) 348-1233

http://wvgazette.com or http://wvgazette.com/News/Mining+the+Mountains

Read my blog, Coal Tattoo at http://blogs.wvgazette.com/coaltattoo/ and follow me on Twitter, http://twitter.com/Kenwardjr And check out Sustained Outrage, a Gazette watchdog journalism blog, http://blogs.wvgazette.com/watchdog/



Toni Krasnic/DC/USEPA/US

04/01/2010 12:52 PM

To Dale Kemery

cc Laurence Libelo, Priscilla Flattery

bcc

Subject Re: Fw: Seeking PFOA letter

Hi Dale,

Hope you're feeling better.

See below - Ken has already published his story and probably doesn't need those documents any more.

I'm attaching the letter in case others ask for it. We don't have the Cincinnati data because it wasn't submitted.

Thanks,

tk 564.0984



# DuPont's C8 pollution from Parkersburg traced all the way to Ohio River at Cincinnati?

March 30, 2010 by Ken Ward Jr.



U.S. Environmental Protection Agency officials are pushing DuPont Co. to conduct more widespread C8 water testing, based at least in part on data that indicates "elevated levels" of the chemical in the Ohio River as far away from DuPont's Parkersburg plant as Cincinnati.

That's what local journalist Callie Lyons reported late last week on her blog:

The EPA is trying to learn how DuPont's C8, also known as PFOA or perfluorooctanoic acid, has made it so far away from Washington Works near Parkersburg, West Virginia. The chemical has been used there for more than fifty years to make Teflon and other stain-resistant, nonstick surfaces and applications – hundreds of applications used in thousands of consumer products.

Cincinnati Water Works has been tracking C8 in the river since 2005 when they detected levels of 100 parts per trillion – a number that exceeds the New Jersey Department of Environmental Protection health-based action level of 40 parts per trillion.

Callie cites, among other things, a copy of a March 3 letter from EPA to DuPont in which federal government officials outline a variety of concerns about plans for any future C8 testing by the company.

I've been unable to get much about this out of EPA's spokesman on C8 issues, Dale Kemery. But Callie was kind enough to pass on a copy of the March 3 letter, so I've posted it here.

This is all part of a process that is going on in which DuPont and EPA are supposed to be trying to figure out where C8 from the Washington Works plant has ended up, what ways humans might be exposed to that C8 and what should be done about it. Concern about C8 and similar chemicals has been growing, especially as scientists continue to find the stuff in people, food and consumer products around the world.

In her blog, Callie notes the following about Cincinnati's water:

Data provided by Cincinnati Water Works indicates that annual sampling has taken place demonstrating a gradual decline of C8 in the water over the past four years. In 2006, levels of 21 parts per trillion were detected in the river. By April 2009 that number had decreased to 11 parts per trillion.

Callie wrote that Jeff Swertfeger, assistant superintendent of water quality and treatment at the Cincinnati Water Works told her his agency did not perform any testing on their finished water.

And, it's important to note that Cincinnati has one of the world's largest granular activated carbon, or GAC, filter systems — technology that should be able to remove C8 from the water, as this report from the Ohio News Network suggested.

Last year, a peer-review panel suggested a comprehensive water sampling program testing for C8 should "extend downstream as far as possible" in the Ohio River. But the peer-review report also suggested it go at least as far as Crab Creek in Mason County, W.Va., which is about 100 miles from the Washington Works plant — and hardly anywhere near Cincinnati.

In its letter to DuPont, EPA says that the company has opposed doing water sampling over a broader geographic area:

... DuPont states that understanding the spatial extent of the PFOA contamination associated with the site is not significant, and that conducting sampling to delineate the extent of contamination further from the site "would not have a meaningful impact on the results of the screening level exposure assessment."

# EPA disagreed, saying:

... EPA believes that the spatial extent is significant and that the suggested additional monitoring data are needed to adequately evaluate exposure further from the site at a screening level.

# The EPA letter continued:

... The Ohio River is a major drinking water source downstream from the site. DuPont data shows elevated PFOA levels in the river at the downstream limit of sampling. The limited spatial extent of the data that DuPont generated does not allow a sufficient understanding of the releases from the site and presence of PFOA in the river.

Therefore, the pathway of migration from the site and exposure to PFOA from use of river water as a source of drinking water downstream from the facility cannot be adequately characterized and assessed on a screening level basis.

Greater than 2 million people use the Ohio River as a source of drinking water downstream from the site, and potential exposure to PFOA associated with the site is not known. EPA believes that this potential pathway of exposure needs to be understood ... and that the currently available data are not sufficient.

Some experts I've talked with seem to think it's incredible that the tiny amounts of C8 discharged by the DuPont plant and various landfills DuPont used could still be showing up at measurable levels more than 250 miles away.

On the other hand, don't forget this study (subscription required) by University of Cincinnati researchers, which found a relationship between breast growth and PFOA levels in the blood of girls and young women from the Cincinnati area, an indication that the chemical acts as an "endocrine disruptor."

Is there some other significant C8 source between Parkersburg and Cincinnati? Where is the C8 in the river coming from?

Dale Kemery Laurence - I'm still catching up after a si... 04/01/2010 12:40:59 PM

From: Dale Kemery/DC/USEPA/US

To: Laurence Libelo/DC/USEPA/US@EPA

Priscilla Flattery/DC/USEPA/US@EPA, Toni Krasnic/DC/USEPA/US@EPA Cc:

04/01/2010 12:40 PM Date: Re: Fw: Seeking PFOA letter Subject:

#### Laurence -

I'm still catching up after a sick day yesterday. Can you forward Toni's letter and the Cincinnati data?

Dale Kemery **Press Officer** Office of Media Relations U.S. Environmental Protection Agency Washington, DC 20460 202-564-7839

From: Laurence Libelo/DC/USEPA/US
To: Dale Kemery/DC/USEPA/US@EPA

Cc: Priscilla Flattery/DC/USEPA/US@EPA, Toni Krasnic/DC/USEPA/US@EPA

Date: 03/30/2010 07:32 PM Subject: Re: Fw: Seeking PFOA letter

#### Dale,

I think Ken Ward is talking about the letter Toni sent around. We have gotten a couple of requests for the letter in the last week or so and it has been sent to several people who may have shared it with him. The Cincinnati water data is from intake and post-treatment measurements the water facility has been collecting since 2005. It is not part of any required monitoring and has not been reported to anyone. They shared it with us recently.

There is other data coming out soon that shows fairly high levels of PFOS and other PFCs. Some of these appear to be coming from the DuPont Parkersburg plant but PFCs, including fairly high levels of PFOS are coming from other sources.

Give me a call if you need more information.

# Laurence 202-564-8553

Dale Kemery	Toni - Do you know what he means by "	03/30/2010 12:06:48 PM
Toni Krasnic	Hi Cathy, Please see the request below	03/30/2010 10:18:20 AM

Toni Krasnic/DC/USEPA/US

05/20/2010 09:42 AM

To Greg Fritz, Jim Willis, Joe Avcin, Katherine Sleasman

cc David Lynch, Diane Sheridan

bcc

Subject Rescheduled: 3M's TSCA 8(e) Submission (FP

GenerationTest Method Development) (Jun 3 01:00 PM EDT

in EPA East 4140)

The original submission and follow-up report are attached below. A pre-meet is scheduled for May 26.





226-3927\_Fluoropolymer Generation Test Method Development Experiments.pdf Third Method Development Report 2010\_05\_12.pdf

Toni Krasnic/DC/USEPA/US

04/27/2010 03:05 PM

To Greg Fritz, Jim Willis, Katherine Sleasman, Laurence Libelo

cc David Lynch, Diane Sheridan

bcc

Subject Invitation: 3M's TSCA 8(e) Submission (FP GenerationTest Method Development) (May 26 02:00 PM EDT in EPA East 4140)

The original submissions is attached below. A follow-up report will come from Industry during the first week of May.

I'll also schedule an internal meeting once we received the report.



226-3927\_Fluoropolymer Generation Test Method Development Experiments.pdf

Toni Krasnic/DC/USEPA/US

To Greg Fritz, Katherine Sleasman, Laurence Libelo, Joe Avcin

05/14/2010 03:30 PM

cc bcc

Subject Fw: Correction to earlier 8(e) report

---- Forwarded by Toni Krasnic/DC/USEPA/US on 05/14/2010 03:27 PM -----

From: ghmillet1@mmm.com

To: Toni Krasnic/DC/USEPA/US@EPA

Date: 05/12/2010 04:52 PM Subject: Correction to earlier email

Hi Toni,

Wouldn't you know it, I sent you a pdf of the report that somehow has two consecutive copies of the report. I am resending it with a single, correct copy. Please disregard the earlier file, since I don't know if the the versions are the same, different, or if one of them is even the correct one.

Sorry about that. This one has the right number of pages at least...

Regards,

George

(See attached file: Third Method Development Report 2010 05 12a.pdf)



Third Method Development Report 2010\_05\_12a.pdf

Toni Krasnic/DC/USEPA/US

03/26/2010 03:30 PM

To Greg Fritz, Laurence Libelo, David Lynch

cc Cathy Fehrenbacher, Diane Sheridan, Katherine Sleasman

bcc

Subject 8(e) notice from 3M: Fluoropolymer Generation Test Method

**Development Experiments** 

Hi,

We just received this study from 3M. FMG (Mark Greenwood is the lead) intends to come in April to discuss the study. Please let me know what you think and whether we need to schedule a meeting to discuss.

Thanks,

tk 564.0984



#### Toni Krasnic/DC/USEPA/US

05/12/2010 02:02 PM

To Greg Fritz, Laurence Libelo

cc David Lynch, Diane Sheridan, Jim Willis, Katherine Sleasman

bcc

Subject Fw: 3M's TSCA 8(e) Submission (FP GenerationTest Method

Development)

Hi,

FMG finally sent the study that accompanies their 8(e) submission. I'll schedule a pre-meet to discuss.

Thanks.

tk 564.0984

----- Forwarded by Toni Krasnic/DC/USEPA/US on 05/12/2010 02:00 PM -----

From: ghmillet1@mmm.com

To: Toni Krasnic/DC/USEPA/US@EPA

Date: 05/12/2010 12:41 PM

Subject: Third Method Development Report

# Dear Toni,

Attached please find an electronic copy of the third Generation Test Method Development Report. This third report on method development covers work carried out from May 2008 to July 2009, and presents information about the techniques used to develop the test method, and summarizes the results of those experiments. This work is

being done on behalf of the SPI Fluoropolymer Manufacturers Group who made a voluntary agreement to develop this method and run the test.

We have a meeting date with you at US EPA to discuss the contents on May 26. We invite you to circulate the report to those colleagues of yours who may have an interest in the work, or who intend to attend that meeting. In particular, would you be kind enough to ensure that Greg Fritz and Jim Willis receive copies.

Also, in the interest of transparency, we invite you to post this document to the appropriate electronic docket so interested members of the public will have an opportunity to catch up on our progress.

We will also be submitting a paper copy of the report to you. We also invite you or any of your colleagues to call me at 651-733-5637 if you have questions or points you want clarified before the meeting.

Regards,

## George

(See attached file: Third Method Development Report 2010\_05\_12.pdf)



Third Method Development Report 2010\_05\_12.pdf

---- Forwarded by Toni Krasnic/DC/USEPA/US on 05/12/2010 02:00 PM -----

# 3M's TSCA 8(e) Submission (FP GenerationTest Method Development)

Wed 05/26/2010 2:00 PM - 3:00

PM

Location: EPA East 4140

Required: Greg Fritz/DC/USEPA/US@EPA, Jim Willis/DC/USEPA/US@EPA, Katherine Sleasman/DC/USEPA/US@EPA, Laurence Libelo/DC/USEPA/US@EPA

Optional: David Lynch/DC/USEPA/US@EPA, Diane Sheridan/DC/USEPA/US@EPA

#### Description

The original submissions is attached below. A follow-up report will come from Industry during the first week of May.

I'll also schedule an internal meeting once we received the report.

William R Berti <William.R.Berti@USA.dupont. com>

06/01/2010 03:37 PM

To eschaefe, Robert C Buck, Robert J Tucker, Barbara S Larsen, David Lynch, Mark Garvey

cc John Gannon

bcc

Subject Draft BioSEP Abstract for SETAC NA

#### Greetings,

The deadline to submit abstracts for this year's SETAC NA conference is this Friday June 4. Attached is a draft abstract on the BioSEP for your review and comments. I think that this will be a great opportunity to discuss the BioSEP and the progress we have made by the time of the conference.

Many thanks and best regards,

Bill

William R. Berti, Ph.D.
DuPont Haskell Global Centers for Health and Environmental Sciences
PO Box 6300, Glasgow 300
2309 Sunset Lake Road, Newark, DE 19714-6300
Office 302/366-6762, Cell 302/545-1624
william.r.berti@usa.dupont.com

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2010 28May BioSEP SETAC Abstract draft.doc

"Ed Schaefer"
<ESCHAEFE@WILDLIFEINTE
RNATIONAL.COM>

04/08/2010 03:52 PM

To David Lynch

cc "Robert J. Tucker \(E-mail\)", "William R. Berti Ph.D \(E-mail\)"

bcc

Subject SEP Costs

David,

Thanks for taking time today to discuss the Biodegradation SEP. I have attached a very basic summary of how changes to the experimental design and various assumptions impact the cost for a SCAS pilot study. Also included is a breakdown of the number of analytical samples generated from a SCAS unit per sampling interval. Hopefully this information will assist in the design of studies that meet the program goals and data quality objectives within the restraints of the SEP. Please let me know if you have any questions or comments.

Regards, Ed Schaefer Wildlife International



"Ed Schaefer"
<ESCHAEFE@WILDLIFEINTE
RNATIONAL.COM>

02/25/2010 09:44 AM

To Laurence Libelo

CC

bcc

Subject Selcia Custom Radiolabeling

Laurence,

Some additional information about one of the contacts that I sent to you yesterday.

Ed

#### Selcia specialize in:

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If you have any questions regarding our services please contact our US Representative Jim Little, or for technical enquires and quotations contact Dr Neil Geach (neil.geach@selcia.com) tel +44 (0)1277 367025.

Best regards

Dave

<< Selcia Radiolabeliing 1.pdf>>

#### **Dave Roberts**

Business Development Director Tel +44 (0)1277 367003 Fax +44 (0)1277 367099 dave.roberts@selcia.com

#### selcia

chemistry .. isotopes . analytics

Fyfield Business & Research Park, Fyfield Road, Ongar, Essex, CM5 0GS, UK.

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Selcia Radiolabeliing 1.pdf

"Ed Schaefer"
<ESCHAEFE@WILDLIFEINTE
RNATIONAL.COM>

06/18/2010 01:22 PM

- To "William R Berti", "Barbara S Larsen", Cathy Fehrenbacher, Greg Fritz, Mark Garvey, Laurence Libelo, David Lynch, "Robert C Buck", "Robert J Tucker", John Washington
- cc "David Weiss", "Ray VanHoven", "Will Nixon"

bcc

Subject Adaptation of EPA Athens Methods

#### Dear All,

The attached method procedure summary describes the work that will be conducted as a result of our discussions over the past few days. We are currently scheduled to start this work on 21 June 2010 and would greatly appreciate receiving any comments as soon as possible. Once again, we would like to thank everyone involved for their input and participation in these helpful discussions.

With kind regards, Ed Schaefer Wildlife International



Summary June 2010 GCextrall.pdf